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rners, and treatment

sen, Shila; Sorensen,  
Henrik Irgang

ICN NO. DATE

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BG, BP, BY, BZ, CA, CH,  
DN, DZ, EC, EE, EE, ES,  
IN, IN, IS, JE, KE, KG,  
MA, MD, ME, ME, MN, NW,  
SD, SE, SG, SI, SK, SK,  
UL, VL, YU, ZA, ZM, ZW,

UG, UM, ZW, AT, BE, CH,  
LI, MC, NL, PT, SE, TR,  
ML, MR, NE, SN, TD, TG

tion of mols. expressed at a  
cells compared to  
tion of cancer-specific  
for delivery and expression  
The invention furthermore  
surface mols. identified by

the methods of the invention. In embodiments of the invention, the targeting complexes comprise the promoters identified by the methods of the invention. In addn. the invention describes methods of identifying binding partners for the cell surface mols. and the binding partners per se. Methods of treatment using the targeting complexes and uses of the targeting complexes for the prepn. of a medicament are also disclosed by the invention. Furthermore, the invention describes uses of the cell surface mols. or fragments thereof for prepn. of vaccines.

- ST screening cancer cell surface mol promoter antitumor drug
- IT INDEXING IN PROGRESS
- IT Glutamate receptors  
 FL: BSU (Biological study, unclassified); BICL (Biological study)  
 (AMPA-binding, agonists/antagonists, binding partner; cancer cell  
 cell-surface mol. and cancer-specific promoter identification,  
 targeting complexes, binding partners, and treatment methods)
- IT Gene, animal  
 FL: BSU (Biological study, unclassified); BICL (Biological study;  
 (PC13; cancer cell cell-surface mol. and cancer-specific promoter  
 identification, targeting complexes, binding partners, and treatment  
 methods)
- IT Gene, animal  
 FL: BSU (Biological study, unclassified); BICL (Biological study;  
 (HMT-1; cancer cell cell-surface mol. and cancer-specific promoter  
 identification, targeting complexes, binding partners, and treatment  
 methods)
- IT Proteins  
 FL: PAC (Pharmacological activity); THU (Therapeutic use); BICL  
 Biological study; USES (Uses)  
 (RFA1, tumor suppressor; cancer cell cell-surface mol. and  
 cancer-specific promoter identification, targeting complexes, binding  
 partners, and treatment methods)
- IT Proteins  
 FL: PAC (Pharmacological activity); THU (Therapeutic use); BICL  
 Biological study; USES (Uses)  
 (Bak, **apoptosis** inducer; cancer cell cell-surface mol. and  
 cancer-specific promoter identification, targeting complexes, binding  
 partners, and treatment methods)
- IT Proteins  
 FL: PAC (Pharmacological activity); THU (Therapeutic use); BICL  
 Biological study; USES (Uses)  
 (Bax, **apoptosis** inducer; cancer cell cell-surface mol. and  
 cancer-specific promoter identification, targeting complexes, binding  
 partners, and treatment methods)
- IT Proteins  
 FL: PAC (Pharmacological activity); THU (Therapeutic use); BICL  
 Biological study; USES (Uses)  
 (Bid, **apoptosis** inducer; cancer cell cell-surface mol. and  
 cancer-specific promoter identification, targeting complexes, binding  
 partners, and treatment methods)
- IT Interleukin receptors  
 FL: BSU (Biological study, unclassified); BICL (Biological study)  
 (IL6; cancer cell cell-surface mol. and cancer-specific promoter  
 identification, targeting complexes, binding partners, and treatment  
 methods)
- IT Tumor antigens  
 FL: BSU (Biological study, unclassified); BICL (Biological study)  
 (CEA; cancer cell cell-surface mol. and cancer-specific promoter  
 identification, targeting complexes, binding partners, and treatment  
 methods)
- IT Proteins  
 FL: PAC (Pharmacological activity); THU (Therapeutic use); BICL  
 Biological study; USES (Uses)  
 (C12orf2, tumor suppressor; cancer cell cell-surface mol. and

- cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Proteins  
RL: PSU (Biological study, unclassified); BIOL (Biological study)  
(HPNA5; targeting complex; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(TPH 54 A; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(TPH 54 B; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Gene, animal  
FL: PSU (Biological study, unclassified); BIOL (Biological study)  
(Cym; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Proteins  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(DCC (deleted in colorectal cancer), tumor suppressor; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(MS 114; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(MS 155; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(MS 275; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(MS 400; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(MS 450; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(MS 55; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(MS 70; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(MS 92; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Proteins  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(DPCH; tumor suppressor; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding

- partners, and treatment methods)
- IT Apolipoproteins  
 FL: BSU (Biological study, unclassified); BIEL (Biological study)  
 (E, peptides, binding partner; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Cadherins  
 FL: BSU (Biological study, unclassified); BIEL (Biological study)  
 (E-, binding partner; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Apolipoproteins  
 FL: BSU (Biological study, unclassified); BIEL (Biological study)  
 (E-, binding partner; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Apolipoproteins  
 FL: BSU (Biological study, unclassified); BIEL (Biological study)  
 (E-, binding partner; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Apolipoproteins  
 FL: BSU (Biological study, unclassified); BIEL (Biological study)  
 (E-, binding partner; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Gene, animal  
 FL: BSU (Biological study, unclassified); BIEL (Biological study)  
 (E-, cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Gene, animal  
 FL: BSU (Biological study, unclassified); BIEL (Biological study)  
 (E-, cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Proteins  
 FL: PAC (Pharmacological activity); THU (Therapeutic use); BIEL (Biological study); USEF (Uses)  
 (FPC, tumor suppressor; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Gene, animal  
 FL: BSU (Biological study, unclassified); BIEL (Biological study)  
 (FPC; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Gene, animal  
 FL: BSU (Biological study, unclassified); BIEL (Biological study)  
 (Fes/Fps; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Gene, animal  
 FL: BSU (Biological study, unclassified); BIEL (Biological study)  
 (Flg; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Gene, animal  
 FL: BSU (Biological study, unclassified); BIEL (Biological study)  
 (Fms; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Gene, animal

- RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(Fyn; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods)
- IT Animal cell line  
(GLC 14; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods)
- IT Animal cell line  
(GLC 16; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods)
- IT Animal cell line  
(GLC 19; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods)
- IT Animal cell line  
(GLC 26; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods)
- IT Animal cell line  
(GLC 28; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods)
- IT Animal cell line  
(GLC 3; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods)
- IT Animal cell line  
(GLC 3; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods)
- IT Animal cell line  
(GLC 3; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods)
- IT Proteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(GFP49; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods)
- IT Proteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(GFP42, targeting complex; cancer cell cell-surface mol. and  
cancer-specific promoter identification, targeting complexes, binding  
partners, and treatment methods)
- IT Proteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(GFP42, targeting complex; cancer cell cell-surface mol. and  
cancer-specific promoter identification, targeting complexes, binding  
partners, and treatment methods)
- IT Proteins  
RL: PAU (Pharmacological activity); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)  
(GEM2, **apoptosis** inducer; cancer cell cell-surface mol. and  
cancer-specific promoter identification, targeting complexes, binding  
partners, and treatment methods)
- IT Genetic methods  
Gene Chip anal.; cancer cell cell-surface mol. and cancer-specific  
promoter identification, targeting complexes, binding partners, and  
treatment methods)
- IT Proteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(IT3AE, targeting complex; cancer cell cell-surface mol. and  
cancer-specific promoter identification, targeting complexes, binding  
partners, and treatment methods)
- IT Proteins

- RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(ITGAV, targeting complex; cancer cell cell-surface mol. and  
cancer-specific promoter identification, targeting complexes, binding  
partners, and treatment methods)
- IT Toxins  
RL: PCU (Biological study, unclassified); BIOL (Biological study)  
(CSIR; binding partner; cancer cell cell-surface mol. and  
cancer-specific promoter identification, targeting complexes, binding  
partners, and treatment methods)
- IT Gene, animal  
RL: EST (Biological study, unclassified); BIOL (Biological study)  
(PSS; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods)
- IT Gene, animal  
RL: EST (Biological study, unclassified); BIOL (Biological study)  
(Pit; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods)
- IT Proteins  
RL: EST (Biological study, unclassified); BIOL (Biological study)  
(L1CAM, recombinant fragments, binding partner; cancer cell  
cell-surface mol. and cancer-specific promoter identification,  
targeting complexes, binding partners, and treatment methods)
- IT Proteins  
RL: EST (Biological study, unclassified); BIOL (Biological study)  
(LH18, targeting complex; cancer cell cell-surface mol. and  
cancer-specific promoter identification, targeting complexes, binding  
partners, and treatment methods)
- IT Animal cell line  
(MCF 36 MI; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods)
- IT Animal cell line  
(MCF H24; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods)
- IT Proteins  
RL: PAT (Pharmacological activity); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)  
(MCF, tumor suppressor; cancer cell cell-surface mol. and  
cancer-specific promoter identification, targeting complexes, binding  
partners, and treatment methods)
- IT Proteins  
RL: PAT (Pharmacological activity); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)  
(MCF-1, tumor suppressor; cancer cell cell-surface mol. and  
cancer-specific promoter identification, targeting complexes, binding  
partners, and treatment methods)
- IT Proteins  
RL: PAT (Pharmacological activity); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)  
(MCF-II, tumor suppressor; cancer cell cell-surface mol. and  
cancer-specific promoter identification, targeting complexes, binding  
partners, and treatment methods)
- IT Gene, animal  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(MCF; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods)
- IT Gene, animal  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(MCF; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods)

- identification, targeting complexes, binding partners, and treatment methods)
- IT Gene, animal  
FL: BSU (Biological study, unclassified); BIOL (Biological study)  
(Met; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Cell adhesion molecules  
FL: BSU (Biological study, unclassified); BIOL (Biological study)  
(E-CAM, NCAM-1, binding partner; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Gene, animal  
FL: BSU (Biological study, unclassified); BIOL (Biological study)  
(E-ras; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Proteins  
FL: BSU (Biological study, unclassified); BIOL (Biological study)  
(E-CAM, targeting complex; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(NCI-H467; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(NCI-H469; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(NCI-H478; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(NCI-446; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(NCI-H1048; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(NCI-H1059; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(NCI-H1092; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(NCI-H1105; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(NCI-H1134; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(NCI-H1238; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line

17 Animal cell line  
(NCI-H1271; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods;

IT Animal cell line  
(OCI-H133); cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods:

IT    Animal cell line  
       (COCI-H1241; cancer cell cell-surface mol. and cancer-specific promoter  
       identification, targeting complexes, binding partners, and treatment  
       methods)

IT Animal cell line  
(MCI-H1417; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods

IT Animal cell line (OCI-H1436); cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods:

IT Animal cell line  
(MCF-H146; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods)

IT Animal cell line  
(OCI-H122; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods

17 Animal cell line  
(HEI-H1014; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods:

IT Animal cell line  
(HEI-H167); cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods;

IT Animal cell line  
(HEI-H1033); cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods:

IT    Animal cell line  
       (ICI-H1694; cancer cell cell-surface mol. and cancer-specific promoter  
       identification, targeting complexes, binding partners, and treatment  
       methods;

TT Animal cell line  
(OCI-H1-36; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods.

IT     Animal cell. line  
        (H1-h1470); cancer cell cell-surface mol. and cancer-specific promoter  
        identification, targeting complexes, binding partners, and treatment  
        methods

IT Animal cell line  
(NCI-H1h76; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods

IT Animal cell line  
(NCI-H197; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods.



- IT Animal cell line  
(NCI-H1981; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(NCI-H1985; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(NCI-H1989; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(NCI-H1993; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(NCI-H1996; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(NCI-H1994; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(NCI-H2009; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(NCI-H2009; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(NCI-H2006; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(NCI-H2001; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(NCI-H2009; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(NCI-H2007; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(NCI-H2003; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(NCI-H2011; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(NCI-H2141; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(NCI-H2171; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line  
(NCI-H195; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line  
(NCI-H2196; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line  
(NCI-H2187; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line  
(NCI-H2203; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line  
(NCI-H2207; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line  
(NCI-H2286; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line  
(NCI-H2290; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line  
(NCI-H2290; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line  
(NCI-H345; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line  
(NCI-H373; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line  
(NCI-H446; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line  
(NCI-H460; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line  
(NCI-H510A; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line  
(NCI-H524; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line  
(NCI-H516; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line  
(NCI-H592; cancer cell cell-surface mol. and cancer-specific promoter

- identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(NCI-H660; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(NCI-H666; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(NCI-H711; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(NCI-H719; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(NCI-H735; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(NCI-H740; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(NCI-H748; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(NCI-H774; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(NCI-H82; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(NCI-H841; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(NCI-H847; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(NCI-H865; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Animal cell line  
(NCI-H889; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Proteins  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(NF- $\kappa$ B, tumor suppressor; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Proteins  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

- (NF-2, tumor suppressor; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Proteins  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 METXR, targeting complex; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Gene, animal  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 Nbr; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Proteins  
 RL: PWC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 PTCH, tumor suppressor; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Gene, animal  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 Fim; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Adipose tissue  
 Adrenal gland  
 Bladder  
 Brain  
 Esophagus  
 Heart  
 Kidney  
 Larynx  
 Leukocyte  
 Liver  
 Lung  
 Mammary gland  
 Muscle  
 Ovary  
 Pancreas  
 Placenta  
 Prostate gland  
 Salivary gland  
 Skin  
 Spinal cord  
 Spleen  
 Stomach  
 Testis  
 Thymus gland  
 Thyroid gland  
 Trachea (anatomical)  
 Uterus  
 (RNA from; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT PCR (polymerase chain reaction)  
 RT-PCR (reverse transcription-PCR); cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Gene, animal  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 Raf; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

- IT Gene, animal  
RL: BSM (Biological study, unclassified); BIOL (Biological study)  
(Pap-3; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods)
- IT Transcription factors  
FL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)  
(Pc; tumor suppressor; cancer cell cell-surface mol. and  
cancer-specific promoter identification, targeting complexes, binding  
partners, and treatment methods)
- IT Gene, animal  
RL: BSM (Biological study, unclassified); BIOL (Biological study)  
(ProA; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods)
- IT Animal cell line  
(FHP-77; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods)
- IT Animal cell line  
(SW 1271; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods)
- IT Gene, animal  
RL: BSM (Biological study, unclassified); BIOL (Biological study)  
(Cxi; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods)
- IT Gene, animal  
RL: BSM (Biological study, unclassified); BIOL (Biological study)  
(Cpi-1; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods)
- IT Gene, animal  
RL: BSM (Biological study, unclassified); BIOL (Biological study)  
(Cic; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods)
- IT Gene, animal  
RL: BSM (Biological study, unclassified); BIOL (Biological study)  
(Syn; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods)
- IT Proteins  
FL: BSM (Biological study, unclassified); BIOL (Biological study)  
(TREP49 (taupoxin-assoc. calcium-binding protein 49); cancer cell  
cell-surface mol. and cancer-specific promoter identification,  
targeting complexes, binding partners, and treatment methods)
- IT Proteins  
FL: BSM (Biological study, unclassified); BIOL (Biological study)  
(TREPFL; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods)
- IT Proteins  
FL: BSM (Biological study, unclassified); BIOL (Biological study)  
(TREPFL; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods)
- IT Receptors  
RL: BSM (Biological study, unclassified); BIOL (Biological study)  
(TNFR-related death receptor 6; cancer cell cell-surface mol. and  
cancer-specific promoter identification, targeting complexes, binding

- partners, and treatment methods)
- IT Proteins  
 FL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (TNF $\alpha$ ; cancer cell cell-surface mol. and cancer-specific promoter  
 identification, targeting complexes, binding partners, and treatment  
 methods)
- IT Proteins  
 FL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
 (Biological study); USES (Uses)  
 (TRAIL (tumor necrosis factor-related **apoptosis**-inducing  
 ligand), **apoptosis** inducer; cancer cell cell-surface mol. and  
 cancer-specific promoter identification, targeting complexes, binding  
 partners, and treatment methods)
- IT Genetic element  
 FL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (TRE (thyroid hormone-responsive element); cancer cell cell-surface  
 mol. and cancer-specific promoter identification, targeting complexes,  
 binding partners, and treatment methods)
- IT Proteins  
 FL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
 (Biological study); USES (Uses)  
 (TSC1, tumor suppressor; cancer cell cell-surface mol. and  
 cancer-specific promoter identification, targeting complexes, binding  
 partners, and treatment methods)
- IT Gene, animal  
 FL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (Trk; cancer cell cell-surface mol. and cancer-specific promoter  
 identification, targeting complexes, binding partners, and treatment  
 methods)
- IT Proteins  
 FL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
 (Biological study); USES (Uses)  
 (VHL, tumor suppressor; cancer cell cell-surface mol. and  
 cancer-specific promoter identification, targeting complexes, binding  
 partners, and treatment methods)
- IT Proteins  
 FL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
 (Biological study); USES (Uses)  
 (WT-1, tumor suppressor; cancer cell cell-surface mol. and  
 cancer-specific promoter identification, targeting complexes, binding  
 partners, and treatment methods)
- IT Gene, animal  
 FL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (Wnt-3a; cancer cell cell-surface mol. and cancer-specific promoter  
 identification, targeting complexes, binding partners, and treatment  
 methods)
- IT Lipoprotein receptors  
 FL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (apolipoprotein E, 2; cancer cell cell-surface mol. and cancer-specific  
 promoter identification, targeting complexes, binding partners, and  
 treatment methods)
- IT Fas antigen  
 Tumor necrosis factors  
 FL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
 (Biological study); USES (Uses)  
 (**apoptosis** inducer; cancer cell cell-surface mol. and  
 cancer-specific promoter identification, targeting complexes, binding  
 partners, and treatment methods)
- IT Cell cycle  
 Arrest, protein contributing to; cancer cell cell-surface mol. and  
 cancer-specific promoter identification, targeting complexes, binding  
 partners, and treatment methods)
- IT Astrocyte

- (astrocytoma; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Receptors  
 FL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (atrial natriuretic peptide clearance receptor; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Proteins  
 FL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (Bcl-2, **apoptosis** inducer; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Fibrinogens  
 Fibronectins  
 Laminins  
 Osteopontin  
 Peptides  
 Thrombospondins  
 Vitronectin  
 FL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (binding partner; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Steroid receptors  
 FL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (binding site; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Proteins  
 FL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (inactive; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Gene, animal  
 FL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (cell; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Gene, animal  
 FL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (c-myc; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Gene, animal  
 FL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (c-src; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Gene, animal  
 FL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (c-fos; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Antitumor agents  
 Brain, neoplasm  
 Chemotherapy  
 Combinatorial library  
 Cytodetective agents  
 Cytotoxic agents  
 Databases

Drug delivery systems  
 Drug screening  
 Drug targets  
 Gene therapy  
 Human  
 Immunotherapy  
 Leukemia  
 Lung, neoplasm  
 Melanoma  
 Neoplasm  
 Northern blot hybridization  
 Ovary, neoplasm  
 Peptide library  
 Phage display library  
 Radiotherapy  
 Surgery  
 Uterus, neoplasm  
 (cancer cell cell-surface mol. and cancer-specific promoter  
 identification, targeting complexes, binding partners, and treatment  
 methods)

IT Bencepoin receptors  
 Epidermal growth factor receptors  
 Insulin-like growth factor I receptors  
 Insulin-like growth factor II receptors  
 Insulin-like growth factor receptors  
 Nucleic acids  
 Promoter (genetic element)  
 RNA  
 Silencer (genetic element)  
 tRNA  
 mRNA  
 FL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (cancer cell cell-surface mol. and cancer-specific promoter  
 identification, targeting complexes, binding partners, and treatment  
 methods)

IT Antisense RNA  
 Cytokines  
 Glucocorticoids  
 Hormones, animal  
 Radiolucides  
 Ribozymes  
 Fibrin  
 Toxins  
 p53 (protein)  
 FL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
 Biological study); USES (Uses)  
 (cancer cell cell-surface mol. and cancer-specific promoter  
 identification, targeting complexes, binding partners, and treatment  
 methods)

IT Proteins  
 FL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
 Biological study); USES (Uses)  
 (capsid, viral, endosomal lytic agent; cancer cell cell-surface mol.  
 and cancer-specific promoter identification, targeting complexes,  
 binding partners, and treatment methods)

IT Ligands  
 FL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (cell-surface mol. binding partners; cancer cell cell-surface mol. and  
 cancer-specific promoter identification, targeting complexes, binding  
 partners, and treatment methods)

IT Post-translational processing  
 (cell-surface mol. extracellular portion; cancer cell cell-surface mol.  
 and cancer-specific promoter identification, targeting complexes,



- binding partners, and treatment methods)
- IT Uterus  
(cervix; FNA from; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Uterus, neoplasm  
(cervix; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Toxins  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(cholera; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Intestine  
(colon, RNA from; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Intestine, neoplasm  
(colon; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Intestine, neoplasm  
(colorectal; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Neoplasm  
(cranioopharyngioma; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Toxins  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(diphtheria; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Brain, neoplasm  
(ependymoma; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Pseudomonas  
(exotoxin; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Toxins  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(exotoxins, Pseudomonas; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Proteins  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(gene MSH2, tumor suppressor; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Receptors  
RL: ESU (Biological study, unclassified); BIOL (Biological study)  
(glial cell line-derived neurotrophic factor .alpha. receptor; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Neuroglia

- (**glioblastoma**; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Anticodies  
 PL: ESU (Biological study, unclassified); BIOL (Biological study)  
 (humanized; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Immunoassay  
 (immunoblotting; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Apoptosis  
 (inducers; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Drug delivery systems  
 (injections, i.v.; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Drug delivery systems  
 (injections, s.c.; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Antigens  
 RL: ESU (Biological study, unclassified); BIOL (Biological study)  
 (insulinoma-assocd. antigen 1; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Gene, animal  
 RL: ESU (Biological study, unclassified); BIOL (Biological study)  
 (int-2; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Biological transport  
 (internalization; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Genetic element  
 RL: ESU (Biological study, unclassified); BIOL (Biological study)  
 (intron; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Glutamate receptors  
 RL: ESU (Biological study, unclassified); BIOL (Biological study)  
 (ionotropic glutamate receptor 2; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Proteins  
 RL: ESU (Biological study, unclassified); BIOL (Biological study)  
 (lamins, B1; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Antigens  
 RL: ESU (Biological study, unclassified); BIOL (Biological study)  
 (large T, SV40, nuclear targeting signal; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Simian virus 40  
 (large tumor antigen, nuclear targeting signal; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Endosome

- (lytic agent; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Brain, neoplasm  
(medulloblastoma; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Proteins  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(membrane-destabilizing, endosomal lytic agent; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Meninges  
(meningioma; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Glutamate receptors  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(metabotropic, 8; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Antibodies  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(monoclonal, 123CB, binding partner; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Bladder  
Gamete and Germ cell  
Mammary gland  
Prostate gland  
(neoplasm; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Nerve, neoplasm  
(neuroblastoma; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Nerve  
(neuron, neuroma; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Receptors  
RL: PST (Biological study, unclassified); BIOL (Biological study)  
(neuronal pentraxin receptor; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Lung, neoplasm  
(non-small-cell carcinoma; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Histones  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(nucleic acid binding agent; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Oligodendrocyte  
(oligodendroglioma; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Peptides  
RL: BSU (Biological study, unclassified); BIOL (Biological study)

(oligopeptides, nuclear targeting signal; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Gene

FL: BSU (Biological study, unclassified); BIOL (Biological study)  
(oncogene, and proto-oncogene, antisense RNA or ribozyme targeted against RNA of; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Cyclin dependent kinase inhibitors

FL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(p16INK4A, tumor suppressor; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Gene, animal

FL: BSU (Biological study, unclassified); BIOL (Biological study)  
(p53; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Proteins

FL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(p73, tumor suppressor; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Drug delivery systems

(par-terials; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Proteins

FL: BSU (Biological study, unclassified); BIOL (Biological study)  
(pentraxins, binding partner; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Neoplasm

(pancreas; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Membrane, biological

(polypeptide destabilizing, endosomal lytic agent; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Nucleic acids

FL: BSU (Biological study, unclassified); BIOL (Biological study)  
(pml39; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Nucleic acids

FL: BSU (Biological study, unclassified); BIOL (Biological study)  
(pml40; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Nucleic acids

FL: BSU (Biological study, unclassified); BIOL (Biological study)  
(pml4; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Nucleic acids

FL: BSU (Biological study, unclassified); BIOL (Biological study)  
(pml6; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

- IT Nucleic acids  
PL: ESU (Biological study, unclassified); BIOL (Biological study)  
(proj.6; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods)
- IT Nucleic acids  
PL: ESU (Biological study, unclassified); BIOL (Biological study)  
(proj.7; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods)
- IT Nucleic acids  
PL: ESU (Biological study, unclassified); BIOL (Biological study)  
(proj.9; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods)
- IT Nucleic acids  
PL: ESU (Biological study, unclassified); BIOL (Biological study)  
(proj.10; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods)
- IT Nucleic acids  
PL: ESU (Biological study, unclassified); BIOL (Biological study)  
(proj.21; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods)
- IT Nucleic acids  
PL: ESU (Biological study, unclassified); BIOL (Biological study)  
(proj.46; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods)
- IT Nucleic acids  
PL: ESU (Biological study, unclassified); BIOL (Biological study)  
(proj.5; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods)
- IT Nucleic acids  
PL: ESU (Biological study, unclassified); BIOL (Biological study)  
(proj.7; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods)
- IT Nucleic acids  
PL: ESU (Biological study, unclassified); BIOL (Biological study)  
(proj.1; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods)
- IT Nucleic acids  
PL: ESU (Biological study, unclassified); BIOL (Biological study)  
(proj.9; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods)
- IT Nucleic acids  
PL: ESU (Biological study, unclassified); BIOL (Biological study)  
(proj.62; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods)
- IT Nucleic acids  
PL: ESU (Biological study, unclassified); BIOL (Biological study)  
(proj.41; cancer cell cell-surface mol. and cancer-specific promoter  
identification, targeting complexes, binding partners, and treatment  
methods)
- IT Nucleic acids  
PL: ESU (Biological study, unclassified); BIOL (Biological study)  
(proj.49; cancer cell cell-surface mol. and cancer-specific promoter

- identification, targeting complexes, binding partners, and treatment methods)
- IT Nucleic acids  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(prob4; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Nucleic acids  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(prob5; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Nucleic acids  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(prob7; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Nucleic acids  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(prob7; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Nucleic acids  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(prob8; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Therapy  
(protein; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Intestine  
(rectum, RNA from; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Virus  
(replication-defective, endosomal lytic agent; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Schwann cell  
(schwannoma; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Intestine  
(small, RNA from; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Lung, neoplasm  
(small-cell carcinoma; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Antibodies  
RL: BSU (Biological study, unclassified); EIDL (Biological study)  
(to cell-surface mol., binding partner; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Lasers  
(treatment with; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT ADP ribosylation factor  
APC protein  
Proteins

- RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(tumor suppressor; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Antigens  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(tumor-associated; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Vaccines  
(tumor; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Bombesin receptors  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(type BBI; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Antitumor agents  
(vaccines; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Proteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(tumor; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Phototherapy  
(with laser light; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Integrins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(alpha.v; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Transforming growth factors  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(beta.-, **apoptosis** inducer; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Transforming growth factor receptors  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(beta.-transforming growth factor type I; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT Transforming growth factor receptors  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(beta.-transforming growth factor type II; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT 186323-cl-6, Caspase  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(**apoptosis** inducer; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT 85637-73-6, Atrial natriuretic peptide  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(atrial natriuretic peptide clearance receptor; cancer cell cell-surface mol. and cancer-specific promoter identification,

- targeting complexes, binding partners, and treatment methods
- IT 51-83-2, Carbachol 11-84-2, Acetylcholine 54-11-5, Nicotine 56-86-0, L-Glutamic acid 56-86-0, L-Glutamic acid, analogs 487-79-5, Kainic acid 2279-57-9, DNQX 3001-16-7, Prothrombin 10174-12-8, 6-Chlorogynurenic acid 11632-78-4, Alpha-Bungarotoxin 53019-39-3, Talipexin 63201-47-41, Quinoxaline-2,3-dione, deriva. 84043-89-4 101771-16-6, BPII52466 102310-16-6, Von Willebrand's factor 111066-14-1, DNQX 118876-98-1, NBQX 120503-15-4 134051-73-6 140187-22-1 140187-15-3 140400-25-1, matrix metalloproteinase 2 201719-11-2, C2-3,4-LOP6 404840-27-2, Resatin 470577-6-4 483030-22-1 483330-26-1 483330-27-2 483330-63-1
- EL: BCU (Biological study, unclassified); BIOL (Biological study  
binding partner; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT 134040-41-2 134230-11-2 470577-6-4 470577-6-4 470577-6-4
- EL: BCU (Biological study, unclassified); PKI (Properties); BIOL (Biological study  
binding partner; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT 18-85-5, Biotin 901-20-1, Streptavidin
- EL: BCU (Biological study, unclassified); BIOL (Biological study  
cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT 10-80-3, Dexamethasone 50-70-6, Actinomycin D 43-79-1, Etoposide 54-05-7, Chlorophyllin 60-81-0, Cycloheximide 301-79-4, Retinoic acid 788-05-4, Camptothecin 1884-00-1, Streptozotocin 36419-42-0, Etoposide 52001-63-7, AZ1387 483330-26-1, Staurosporine 6716-95-8, Thapsigargin 14111-17-1, Oxalic acid
- EL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT 9001-48-0
- EL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
endothelial lytic agent; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT 11-44-1, Spermine 14-10-9, Spermidine 11104-10-1, Poly-L-lysine 50-00-00-5, Poly-D-lysine
- EL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
nucleic acid binding agent; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT 482671-30-7 482671-31-8 482671-32-9 482671-33-0 482671-34-1 482671-35-2 482671-36-3 482671-37-4 482671-38-5 482671-39-6 482671-40-7 482671-41-8 482671-42-9 482671-43-0 482671-44-1 482671-45-2 482671-46-3 482671-47-4 482671-48-5 482671-49-6 482671-50-7 482671-51-8 482671-52-9 482671-53-0 482671-54-1 482671-55-2 482671-56-3 482671-57-4 482671-58-5 482671-59-6 482671-60-7 482671-61-8 482671-62-9 482671-63-0 482671-64-1 482671-65-2 482671-66-3 482671-67-4
- EL: PRP (Properties)  
unclaimed nucleotide sequence; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
- IT 482671-10-8 482671-11-9 482671-12-0 482671-13-1 482671-14-2 482671-15-3 482671-16-4 482671-17-5 482671-18-6 482671-19-7 482671-20-8 482671-21-9 482671-22-0 482671-23-1 482671-24-2



SL: PEP (Properties)

IT	130143-40-6	130143-41-3	130143-42-2	130143-43-3	130143-44-2
	130143-45-3	130143-46-2	130143-47-1	130143-48-0	130143-49-9
	130143-50-8	130143-51-7	130143-52-6	130143-53-5	130143-54-4
	130143-55-3	130143-56-2	130143-57-1	130143-58-0	130143-59-9
	130143-60-8	130143-61-7	130143-62-6	130143-63-5	130143-64-4
	130143-65-3	130143-66-2	130143-67-1	130143-68-0	130143-69-9
	130143-70-8	130143-71-7	130143-72-6	130143-73-5	130143-74-4
	130143-75-3	130143-76-2	130143-77-1	130143-78-0	130143-79-9
	130143-80-8	130143-81-7	130143-82-6	130143-83-5	130143-84-4
	130143-85-3	130143-86-2	130143-87-1	130143-88-0	130143-89-9
	130143-90-8	130143-91-7	130143-92-6	130143-93-5	130143-94-4
	130143-95-3	130143-96-2	130143-97-1	130143-98-0	130143-99-9

ALL: THE PROCEEDINGS

L75 ANSWER . OF 13 QUESTIONS COPYRIGHT 2004 ACS

AN 2002:832650 HCAPLUS

DN 137:351517

TI Use of dendritic cell-attracting chemokines for augmentation of an immune response

IN (Miles; Thomas J.; Tailor, Dale; Berkowitz, Robert; Thoms, Wend; Howard, Marlene; Hemack, Brett)

PA The Innocent 17X, 1937.

SO 1907 Int. Appl., 33 pp.

CONFIDENTIAL

DT      7-27-55

LA 2862.ch

IC 2011 A6280 39-111

CC 11-1 - Inorganic Chemistry

FAN, CHIT 5

PATENT NO.	FIND DATE	APPLICATION NO.	DATE
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PI WO 2002031403 AM 20021001 WO 2001-004171 20011001

[illegible]

PEAI 01 2 01-3 4511 A 2 01041

AB The authors describe a method for enhancing an **immune response** to an antigen. In an example, the authors demonstrate that the antibody **response** to a model antigen is enhanced by the coadministration of C1q or vMMP2 chemokines. The comps. and methods are useful for, among other things, vaccine formulation for therapeutic and prophylactic vaccination (**immunization**) and for prodn. of useful antibodies (e.g., monoclonal antibodies for therapeutic or diagnostic use).

ST vaccine immunization dendritic cell chemokine

- ```
IT Chemokines
RL: EBU (Biological study, unclassified); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
    CCL-1; enhancement of immune responses to antigens
    by
IT Chemokines
RL: EBU (Biological study, unclassified); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
    CCL-2; enhancement of immune responses to antigens
    by
IT Glycoproteins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
    CD40-L (antigen CD40 ligand); with dendritic cell-attracting
    chemokines for enhancement of immune responses)
IT Chemokines
RL: EBU (Biological study, unclassified); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
    CXCL-1 (hemofiltrate C chemokine 1); enhancement of immune
responses to antigens by
IT Chemokines
RL: EBU (Biological study, unclassified); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
    CXCK-2, viral; enhancement of immune responses to
    antigens by
IT Chemokines
RL: EBU (Biological study, unclassified); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
    MIP-1 (macrophage-derived chemokine); enhancement of immune
responses to antigens by
IT Chemokines
RL: EBU (Biological study, unclassified); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
    RANTES; enhancement of immune responses to
    antigens by
IT Chemokines
RL: EBU (Biological study, unclassified); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
    MCP-1; enhancement of immune responses to antigens by
IT Chemokines
RL: EBU (Biological study, unclassified); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
    MIG (monokine induced by interferon-gamma.); enhancement of
immune responses to antigens by
IT Chemokines
RL: EBU (Biological study, unclassified); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
    TCEK; enhancement of immune responses to antigens
    by
IT Immunostimulants
    Adjuvants, Freund's incomplete; with dendritic cell-attracting
    chemokines for enhancement of immune responses)
IT Immunostimulants
    Adjuvants; with dendritic cell-attracting chemokines for enhancement
    of immune responses)
IT Astrocyte
    Astrocytoma; dendritic cell-attracting chemokines for enhancement of
    Antitumor immune response to)
IT Immune stimulation
    ; dendritic cell-attracting chemokines)
IT Polysaccharides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
    Capsular; with dendritic cell-attracting chemokines for enhancement of
immune responses)
IT Drug delivery systems
    Carriers; for dendritic cell-attracting chemokines in enhancement of
immune responses)
IT Antibodies
```

- PL: BSU (Biological study, unclassified); BIOL (Biological study)  
(chemotaxins for dendritic cells enhance **immune response** by)
- IT Human  
(dendritic cell-attracting chemokines enhance **immune response** to antigens)
- IT Melanoma  
(dendritic cell-attracting chemokines for enhancement of antitumor **immune response** to)
- IT hepatitis virus  
influenza virus  
(dendritic cell-attracting chemokines for enhancement of **immune responses** to)
- IT Chemokines  
PL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(dendritic cell-attracting; enhancement of **immune responses** to antigens by)
- IT Brain, neoplasm  
Ovary, neoplasm  
(enhancement of antitumor **immune response** by expression of dendritic cell-attracting chemokines in)
- IT Neisseria meningitidis  
Streptococcus  
Streptococcus pneumoniae  
(enhancement of **immune response** with dendritic cell-attracting chemokines on polysaccharide carriers from)
- IT Rotaxin  
Macrophage inflammatory protein 1.alpha.  
Macrophage inflammatory protein 1.beta.  
Macrophage inflammatory protein 2  
Monocyte chemoattractant protein-1  
RANTES (chemokine)  
PL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(enhancement of **immune responses** to antigens by)
- IT Dendritic cell  
(enhancement of **immune responses** to antigens by chemotaxins for)
- IT Immunization  
(genetic; with antigen in combination with dendritic cell-attracting chemokines)
- IT Neuroglia  
(glioblastoma; dendritic cell-attracting chemokines for enhancement of antitumor **immune response** to)
- IT Neuroglia  
(glioma; dendritic cell-attracting chemokines for enhancement of antitumor **immune response** to)
- IT Neuroglia  
(gliosarcoma; dendritic cell-attracting chemokines for enhancement of antitumor **immune response** to)
- IT Chemokines  
PL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(leukotactins; enhancement of **immune responses** to antigens by)
- IT Chemokines  
PL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(macrophage inflammatory protein 1.gamma.; enhancement of **immune responses** to antigens by)
- IT Chemokines  
PL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL

- (Biological study); USES (Uses)  
macrophage inflammatory protein 3.alpha.; enhancement of **immune responses** to antigens by)
- IT Chemokines  
EL: ECU (Biological study, unclassified); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)  
macrophage inflammatory protein 3.beta.; enhancement of **immune responses** to antigens by)
- IT Chemokines  
EL: ECU (Biological study, unclassified); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)  
macrophage inflammatory protein-1.delta.; enhancement of **immune responses** to antigens by)
- IT FANTES (chemokine)  
EL: ECU (Biological study, unclassified); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)  
methionylated; enhancement of **immune responses** to antigens by)
- IT Chemokines  
EL: ECU (Biological study, unclassified); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)  
monocyte chemoattractant protein 3; enhancement of **immune responses** to antigens by)
- IT Cytokines  
EL: ECU (Biological study, unclassified); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)  
monocyte chemoattractant protein 4; enhancement of **immune responses** to antigens by)
- IT Chemokines  
EL: ECU (Biological study, unclassified); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)  
monocyte chemoattractant protein 5; enhancement of **immune responses** to antigens by)
- IT Chemokines  
EL: ECU (Biological study, unclassified); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)  
monocyte chemoattractant protein-2; enhancement of **immune responses** to antigens by)
- IT Mammary gland  
(neoplasm; dendritic cell-attracting chemokines for enhancement of antitumor **immune response** to)
- IT Fusion proteins (chimeric proteins)  
EL: ECU (Biological study, unclassified); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)  
dendritic cell-attracting chemokines for enhancement of **immune responses**)
- IT Vaccines  
synthetic; enhancement of **immune responses** to antigens by chemotaxins for dendritic cells)
- IT Antigens  
EL: ECU (Biological study, unclassified); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)  
tumor-asso.; dendritic cell-attracting chemokines for enhancement of **immune responses** to)
- IT Vaccines  
tumor; enhancement of **immune responses** to antigens by chemotaxins for dendritic cells)
- IT Antitumor agents  
vaccines; enhancement of **immune responses** to antigens by chemotaxins for dendritic cells)
- IT Gene therapy  
(with dendritic cell-attracting chemokines)
- IT Alums

## Cytokines

Interleukin 1  
Interleukin 10  
Interleukin 12  
Interleukin 13  
Interleukin 18  
Interleukin 2  
Interleukin 4  
Interleukin 6

EL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(with dendritic cell-attracting chemokines for enhancement of  
**immune responses**)

IT Interferon

EL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(gamma; with dendritic cell-attracting chemokines for enhancement of  
**immune responses**)

IT 474 37-38-7

EL: FRP (Properties)  
(dendritic cell-attracting chemokines for enhancement of **immune  
responses**)

IT 474:45-29-4 474345-30-7 474345-31-8 474345-32-9 474345-33-0  
474 45-34-1

EL: FRP (Properties)  
(unclaimed protein sequence; use of dendritic cell-attracting  
chemokines for augmentation of an **immune response**)

IT 4904-54-0, Dextrans, biological studies 33869-56-1, GM-CSF

EL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(with dendritic cell-attracting chemokines for enhancement of  
**immune responses**)

L75 ANSWER 3 OF 14 HCAPLUS COPYRIGHT 2003 ACS

AN 2002:220814 HCAPLUS

DN 136:259587

TI Novel tumor-associated marker

IN Tracht, Ilya; Canfield, Robert; Kalan'arov, Gary; Rudchenko, Sergei

PA The Trustees of Columbia University in the City of New York, USA

SO JCT Int. Appl., 276 pp.

CODEN: PIRNDL

DT Patent

LA English

IC ICM C12Q

CC 3-16 (Biochemical Methods)

Section cross-reference(s): 1, 14, 15

FAN.CIT 1

| PATENT NO.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | KIND | DATE     | APPLICATION NO. | DATE     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|----------|
| WO 2002011351                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | A2   | 20020311 | WO 2001-US 9242 | 20010918 |
| W: AE, AG, AL, AM, AT, AU, AV, BA, BB, BG, BI, BY, CA, CH, CN, CO, CR, CU, CV, DE, DK, DM, DO, EC, EE, EG, FI, GB, GD, GE, GH, GM, GN, GU, HD, IL, IN, JP, KE, KG, KH, KR, LA, LC, LK, LR, LU, LV, LY, MA, MG, MK, MN, MW, MX, MY, NZ, OD, OG, OH, OM, PA, PE, PG, PH, PK, PL, PT, PU, PY, SA, SE, SG, SI, SK, SL, SM, SN, SR, ST, SU, SV, SW, SY, TD, TE, TG, TH, TI, TJ, TR, TT, TZ, UA, UG, US, UZ, VC, VE, VJ, ZA, ZB, ZM, ZN, ZZ, AA, AB, AC, AD, AE, AF, AG, AH, AI, AJ, AK, AL, AM, AN, AO, AP, AQ, AR, AS, AT, AU, AV, AW, AX, AY, AZ, BA, BB, BC, BD, BE, BF, BG, BH, BI, BJ, BK, BL, BM, BN, BO, BP, BQ, BR, BS, BT, BU, BV, BW, BX, BY, BZ, CA, CB, CC, CD, CE, CF, CG, CH, CI, CJ, CK, CL, CM, CN, CO, CP, CQ, CR, CS, CT, CU, CV, CW, CX, CY, CZ, DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, DK, DL, DM, DN, DO, DP, DQ, DR, DS, DT, DU, DV, DW, DX, DY, DZ, EA, EB, EC, ED, EE, EF, EG, EH, EI, EJ, EK, EL, EM, EN, EO, EP, EQ, ER, ES, ET, EU, EV, EW, EX, EY, EZ, FA, FB, FC, FD, FE, FF, FG, FH, FI, FJ, FK, FL, FM, FN, FO, FP, FQ, FR, FS, FT, FU, FV, FW, FX, FY, FZ, GA, GB, GC, GD, GE, GF, GH, GI, GJ, GK, GL, GM, GN, GO, GP, GQ, GR, GS, GT, GU, GV, GW, GX, GY, GZ, HA, HB, HC, HD, HE, HF, HG, HH, HI, HJ, HK, HL, HM, HN, HO, HP, HQ, HR, HS, HT, HU, HV, HW, HX, HY, HZ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, IK, IL, IM, IN, IO, IP, IQ, IR, IS, IT, IU, IV, IW, IX, IY, IZ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, JK, JL, JM, JN, JO, JP, JQ, JR, JS, JT, JU, JV, JW, JX, JY, JZ, KA, KB, KC, KD, KE, KF, KG, KH, KI, KJ, KK, KL, KM, KN, KO, KP, KQ, KR, KS, KT, KU, KV, KW, KX, KY, KZ, LA, LB, LC, LD, LE, LF, LG, LH, LI, LJ, LK, LM, LN, LO, LP, LQ, LR, LS, LT, LU, LV, LW, LX, LY, LZ, MA, MB, MC, MD, ME, MF, MG, MH, MI, MJ, MK, ML, MN, MO, MP, MQ, MR, MS, MT, MU, MV, MW, MX, MY, MZ, NA, NB, NC, ND, NE, NF, NG, NH, NI, NJ, NK, NL, NM, NO, NP, NQ, NR, NS, NT, NU, NV, NW, NX, NY, NZ, OA, OB, OC, OD, OE, OF, OG, OH, OI, OJ, OK, OL, OM, ON, OO, OP, OQ, OR, OS, OT, OU, OV, OW, OX, OY, OZ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, PK, PL, PM, PN, PO, PP, PQ, PR, PS, PT, PU, PV, PW, PX, PY, PZ, QA, QB, QC, QD, QE, QF, QG, QH, QI, QJ, QK, QL, QM, QN, QO, QP, QQ, QR, QS, QT, QU, QV, QW, QX, QY, QZ, RA, RB, RC, RD, RE, RF, RG, RH, RI, RJ, RK, RL, RM, RN, RO, RP, RQ, RR, RS, RT, RU, RV, RW, RX, RY, RZ, SA, SB, SC, SD, SE, SF, SG, SH, SI, SJ, SK, SL, SM, SN, SO, SP, SQ, SR, SS, ST, SU, SV, SW, SX, SY, SZ, TA, TB, TC, TD, TE, TF, TG, TH, TI, TJ, TK, TL, TM, TN, TO, TP, TQ, TR, TS, TT, TU, TV, TW, TX, TY, TZ, UA, UB, UC, UD, UE, UF, UG, UH, UI, UJ, UK, UL, UM, UN, UO, UP, UQ, UR, US, UT, UV, UW, UX, UY, UZ, VA, VB, VC, VD, VE, VF, VG, VH, VI, VJ, VK, VL, VM, VN, VO, VP, VQ, VR, VS, VT, VU, VV, VW, VX, VY, VZ, WA, WB, WC, WD, WE, WF, WG, WH, WI, WJ, WK, WL, WM, WN, WO, WP, WQ, WR, WS, WT, WU, WV, WW, WX, WY, WZ, XA, XB, XC, XD, XE, XF, XG, XH, XI, XJ, XK, XL, XM, XN, XO, XP, XQ, XR, XS, XT, XU, XV, XW, XX, XY, XZ, YA, YB, YC, YD, YE, YF, YG, YH, YI, YJ, YK, YL, YM, YN, YO, YP, YQ, YR, YS, YT, YU, YV, YW, YX, YY, YZ, ZA, ZB, ZC, ZD, ZE, ZF, ZG, ZH, ZI, ZJ, ZK, ZL, ZM, ZN, ZO, ZP, ZQ, ZR, ZS, ZT, ZU, ZV, ZW, ZX, ZY, ZZ. |      |          |                 |          |
| AU 200109278                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | A5   | 20020316 | AU 2001-9242    | 20010918 |
| US 2000-064954                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | A    | 20000918 |                 |          |
| WO 2001-032942                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | W    | 20010918 |                 |          |

AB The present invention provides a heteromyeloma cell which does not produce any antibody and is capable of producing a trioma cell which does not produce any antibody when fused with a human lymphoid cell. Wherein the trioma cell so produced is capable of producing a tetroma cell which

produces a monoclonal antibody having specific binding affinity for an antigen when fused with a second human lymphoid cell and such second human lymphoid cell produces an antibody having specific binding affinity for the antigen. The present invention provides monoclonal antibody-producing hybridomas designated 27.F7 and 27.B1. The invention provides a method of detecting TIP-2 antigen on the surface of cancer cells in a sample, and therefore a method for diagnosing cancer in a subject. Further a method for diagnosing and treating said cancer in a subject is provided. The invention provides isolated peptides amino acid sequences (Lys Leu Leu Gly Gly Glu Ile Gly Leu) and (Ser Leu Leu Gly Cys Arg His Tyr Glu Val). The invention provides a kit for detecting the presence of TIP-2 antigen-bearing cancer cells. The invention provides a method for immunohistochemical screening of tissue sections. The invention provides a method for monitoring progression of cancer wherein the cancer cells are TIP-2 antigen-bearing cells.

- ST cancer diagnosis TIP protein genetic method monoclonal antibody immunohistochem
- IT Proteins  
 PH: ANT (Analyte); DGN (Diagnostic use); AN: T (Analytical study); BIOL (Biological study); USES (Uses)  
 : TIP-2/Tax interacting, clone 2; novel tumor-assocd. marker)
- IT Hybridomas  
 : 27.F7 and 27.B1; novel tumor-assocd. marker)
- IT Multiple myeloma  
 : 27.B1 hetero-, fused with human lymphoid cell forming tetroma cells; novel tumor-assocd. marker)
- IT Imaging  
 : RME, device; novel tumor-assocd. marker)
- IT PCR (polymerase chain reaction)  
 : RT-PCR (reverse transcription-PCR); novel tumor-assocd. marker)
- IT Infection  
 : agent bi; novel tumor-assocd. marker)
- IT Bacillus anthracis  
 : Anthrax from; novel tumor-assocd. marker)
- IT Bacteria (Eubacteria)  
 Eubacteria  
 Virus  
 : antigen; novel tumor-assocd. marker)
- IT Skin, neoplasm  
 : basal cell carcinoma; novel tumor-assocd. marker)
- IT Tumors  
 RE: AEV (Adverse effect, including toxicity); BIOL (Biological study)  
 : tubulin; novel tumor-assocd. marker)
- IT Lung, neoplasm  
 Mammary gland  
 Ovary, neoplasm  
 Prostate gland  
 : carcinoma; novel tumor-assocd. marker)
- IT Uterus, neoplasm  
 : cervix, carcinoma; novel tumor-assocd. marker)
- IT Intestine, neoplasm  
 : colon, carcinoma; novel tumor-assocd. marker)
- IT Cytolysis  
 : complement-dependent; novel tumor-assocd. marker)
- IT Immunity  
 : dysfunction of, CD3 or CD4 mediated; novel tumor-assocd. marker)
- IT Enzymes, biological studies  
 : for uses, animal, biological studies  
 RE: AEV (Adverse effect, including toxicity); BIOL (Biological study)  
 : dysfunction of; novel tumor-assocd. marker)
- IT Uterus, neoplasm  
 : endometrium, carcinoma; novel tumor-assocd. marker)
- IT Cytometry

(flow; novel tumor-assocd. marker)

IT Histochemistry  
(formalin-fixed; novel tumor-assocd. marker)

IT Immunoglobulins  
RL: ANT (Analyte); PRP (Properties); ANST (Analytical study)  
(fragments, Fab; novel tumor-assocd. marker)

IT Lymphocyte  
(fused with MFP-2 trioma cell or heteromyeloma cell; novel tumor-assocd. marker)

IT Neuroglia  
glioblastoma multiforme; novel tumor-assocd. marker)

IT Transplant and Transplantation  
graft-vs.-host reaction; novel tumor-assocd. marker)

IT Immunoassay  
(immunohistochem.; novel tumor-assocd. marker)

IT Scintigraphy  
(immunoscintigraphy, x-ray; novel tumor-assocd. marker)

IT Cell proliferation  
(inhibition of; novel tumor-assocd. marker)

IT Drug delivery systems  
(liposomes; novel tumor-assocd. marker)

IT Neoplasm  
(metastasis; novel tumor-assocd. marker)

IT Antidotes  
BL: BSN (Biosynthetic preparation); PRP (Properties); BIOL (Biological study); PPEP (Preparation)  
(monoclonal; novel tumor-assocd. marker)

IT Leukemia  
(myelogenous; novel tumor-assocd. marker)

IT Lymphocyte  
(natural killer cell; novel tumor-assocd. marker)

IT Nerve, neoplasm  
(neuroblastoma; novel tumor-assocd. marker)

IT AIDS (disease)  
Animal tissue

**Apoptosis**

Audiotape

Autoimmune disease

Bacteremia

Blood analysis

Blood plasma

Blood serum

Bone marrow

Cerebrospinal fluid

Chemiluminescent substances

Chemotherapy

Chromosome

Concentration (process)

Cryopreservation

Cryptococcus (fungus)

Cryptococcus (insect)

Culture media

Drugs

Eyes

Ebola virus

Epitopes

Escherichia coli

Fluorescent substances

Fusion, biological

Genetic methods

Hantavirus

Human  
 Human T-lymphotropic virus 1  
 Human T-lymphotropic virus 2  
 Human herpesvirus  
 Human papillomavirus  
 Imaging agents  
 Immobilization, molecular  
 Immunity  
 Influenza virus  
 Klebsiella  
 Labels  
 Lupus erythematosus  
 Lymph  
 Lymphoma  
 Macrophage  
 Mammary gland  
 Melanoma  
 Mouse  
 Neoplasm  
 Nucleic acid hybridization  
 Optical imaging devices  
 Precipitation (chemical)  
 Prostate gland  
 Protein sequences  
 Radiochemical analysis  
 Rheumatoid arthritis  
 Saliva  
 Sepsis  
 Septicemia  
 Staphylococcus  
 Streptococcus  
 Tear (ocular fluid)  
 Test kits  
 Testis, neoplasm  
 Tetanus  
 Urine analysis  
 Viremia  
 (novel tumor-assoc. marker)  
 IT Lipopolysaccharides  
 FL: ANT (Analyte); ANST (Analytical study)  
 (novel tumor-assoc. marker)  
 IT DNA  
 FL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL  
 (Biological study); USES (Uses)  
 (novel tumor-assoc. marker)  
 IT Enzymes, uses  
 FL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
 (novel tumor-assoc. marker)  
 IT Faculticides, biological studies  
 FL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical  
 study); BIOL (Biological study); USES (Uses)  
 (novel tumor-assoc. marker)  
 IT mRNA  
 FL: BCU (Biological study, unclassified); PEP (Physical, engineering or  
 chemical process); BIOL (Biological study); PROC (Process)  
 (novel tumor-assoc. marker)  
 IT Primers (nucleic acid)  
 FL: NTU (Other use, unclassified); USES (Uses)  
 (novel tumor-assoc. marker)  
 IT Alcohols, uses  
 FL: NTU (Other use, unclassified); PEP (Physical, engineering or chemical  
 process); PROC (Process); USES (Uses)  
 (novel tumor-assoc. marker)



IT Tokins  
 Toxoids  
 PL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (novel tumor-assocd. marker)

IT Bone, neoplasm  
 (osteosarcoma; novel tumor-assocd. marker)

IT Immunization  
 (passive; novel tumor-assocd. marker)

IT **Dendritic cell**  
 (in novel or; novel tumor-assocd. marker)

IT Shock (circulatory cell, case)  
 (septum; novel tumor-assocd. marker)

IT Venoma  
 (snake; novel tumor-assocd. marker)

IT Venoma  
 (spider; novel tumor-assocd. marker)

IT Carcinoma  
 (squamous cell; novel tumor-assocd. marker)

IT Thyroid gland, disease  
 (thyroiditis; novel tumor-assocd. marker)

IT Hybridoma  
 (triple; MFP-2 fused with lymphoid cell; novel tumor-assocd. marker)

IT 4: 011-17-1  
 PL: PEP (Properties)  
 (unclaimed; novel tumor-assocd. marker)

IT 1-35-6, Biotin 14546-47-3, Phosphorus, isotope of mass 32, uses  
 17749-66- , Phosphorus, isotope of mass 33, uses  
 PL: AAS (Analytical reagent use); ANST (Analytical study); USES (Uses)  
 (novel tumor-assocd. marker)

IT 1-4-53-7, 8-Azaguanine 40861-47-0, Geneticin  
 PH: PAC (Pharmacological activity); BIOL (Biological study)  
 (novel tumor-assocd. marker)

IT 4 434-25-1 40445-16-1  
 PH: AMP (Analyte); DGN (Diagnostic use); THU (Therapeutic use); ANST  
 (Analytical study); BIOL (Biological study); USES (Uses)  
 (protein sequence; novel tumor-assocd. marker)

IT 4 5011-18-0, 2: PH: WO0222851 SEQID: 12 unclaimed DNA 405011-21-4, 4:  
 PH: WO0222851 SEQID: 14 unclaimed DNA 405011-23-6, 6: PH: WO0222851  
 SEQID: 16 unclaimed DNA 405011-30-1, 8: PH: WO0222851 SEQID: 18  
 unclaimed DNA 405011-67-8 405011-67-8 405011-70-3 405011-72-5  
 4 5011-74-7 405011-76-9 405011-78-1  
 PH: PEP (Properties)  
 (unclaimed nucleotide sequence; novel tumor-assocd. marker)

IT 4 5011-18-0 405011-18-0 405011-18-0 405011-24-7 405011-64-5  
 4 5011-66-7 405011-66-0 405011-71-4 405011-73-6 405011-75-6  
 4 5011-77-0 405011-77-2  
 PH: PEP (Properties)  
 (unclaimed protein sequence; novel tumor-assocd. marker)

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AN 2000:688526 HCAPLUS

TI Induction of antigen-specific unresponsiveness by glioblastoma  
 culture supernatants (GCS)

IN Shearer, Gene M.; Zou, Jian-ping; Coligan,  
 John E.; Chougnnet, Claire

PA The Government of the United States of America, as Represented by the  
 Secret, USA

SO Int. Appl.

COEN: PIKX52

DT Patent

LA English

IC ICM A61K039-00

PAN.CNT 1

|      | PATENT NO.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | FIND DATE   | APPLICATION NO. | DATE     |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------------|----------|
| PI   | WO 2000056256                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | A2 10000928 | WO 2000-051959  | 20000323 |
|      | WO 2000056256                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | A1 10010135 |                 |          |
|      | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DO, DZ, EE, ES, FI, FR, GB, GR, GU, HK, HU, ID, IL, IN, IS, IT, JP, KE, KG, KH, KR, KZ, LA, LB, LC, LI, LU, LV, MA, MD, ME, MG, MK, MN, MW, MX, MY, NZ, OM, PA, PE, PG, PH, PK, PL, PT, QA, RO, RU, SD, SE, SG, SI, SK, SL, SM, SN, SR, ST, SV, SW, SY, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DO, DZ, EE, ES, FI, FR, GB, GR, GU, HK, HU, ID, IL, IN, IS, IT, JP, KE, KG, KH, KR, KZ, LA, LB, LC, LI, LU, LV, MA, MD, ME, MG, MK, MN, MW, MX, MY, NZ, OM, PA, PE, PG, PH, PK, PL, PT, QA, RO, RU, SD, SE, SG, SI, SK, SL, SM, SN, SR, ST, SV, SW, SY, UA, UG, US, UZ, VN, YU, ZA, ZW |             |                 |          |
|      | FW: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DO, DZ, EE, ES, FI, FR, GB, GR, GU, HK, HU, ID, IL, IN, IS, IT, JP, KE, KG, KH, KR, KZ, LA, LB, LC, LI, LU, LV, MA, MD, ME, MG, MK, MN, MW, MX, MY, NZ, OM, PA, PE, PG, PH, PK, PL, PT, QA, RO, RU, SD, SE, SG, SI, SK, SL, SM, SN, SR, ST, SV, SW, SY, UA, UG, US, UZ, VN, YU, ZA, ZW                                                                                                                                                                                                                                                                                                                                                        |             |                 |          |
|      | AU 2000041195                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | A1 10011119 | AU 1000-40295   | 21000323 |
|      | EP 1161211                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | A2 10 20112 | EP 1000-919639  | 21000123 |
|      | F: AE, BE, BR, BG, DE, DK, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, ST, SV, TR, UK, US                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |             |                 |          |
|      | JP 200254471                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | T1 10 21119 | JP 1000-606260  | 21000323 |
| PRAI | US 1990-100996P                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | F 10 199013 |                 |          |
|      | WO 1000-031959                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | W 1000013   |                 |          |

AB The present invention concerns methods of specifically inhibiting an **immune response** of a subject to one or more selected antigens using an **immunosuppressive** composition derived from a **glioblastoma** cell line. The method steps include obtaining a population of **antigen presenting cells (APCs)**; loading the APC population with specific antigens in auto-immune diseases; or using donor APCs for transplantation; inducing the APC population with the **immunosuppressive** composition; and introducing the modulated cells into the subject being treated. The APCs can be monocytes, macrophages, or dendritic cells. This method causes specific inhibition of the **immune response** because it induces **apoptosis** and/or anergy in the subject's T cells specific for **antigens present** on the APCs, but does not affect the **immune response** to antigens not present on the APC surfaces. The particular embodiment of the present method is the specific inhibition of a **transplant recipient's immune reaction to antigens present** on the allogeneic **graft**. A second particular embodiment of the present method is the specific inhibition of the **immune response** to an autoantigenic protein by a subject suffering from an autoimmune disease.

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AN 2000:109818 HCAPLUS

DN 133:41741

TI Cell therapy: achievements and perspectives

AU Bordignon, Claudio; Carlo-Stella, Carmelo; Colombo, Mario Paolo; De Vincentiis, Armando; Lanata, Luigi; Lemoli, Roberto Massimo; Locatelli, Franco; Olivieri, Attilio; Rondelli, Dario; Zanon, Paola; Tura, Sante

CS Institute of Hematology, S. Raffaele Hospital, Milan, Italy

SO Haematologica (1999), 84(12), 1110-1149

CODEN: HAEMAX; ISSN: 0290-6076

PB Ferrata Storti Foundation

DT Journal; General Review

LA English

CC 15-C (Immunotherapies)

AB A review with 361 refs. Cell therapy can be considered as a strategy aimed at replacing, repairing, or enhancing the biol. function of a damaged tissue or system by means of autologous or allogeneic cells. There have been major advances in this field in the last few years. This has prompted the Working Group on Hematopoietic Cells to examine the current utilization of this therapy in clin. hematol. The method employed

for prepg. this review was that of informal consensus development. Members of the Working Group met three times, and the participants at these meetings examd. a list of problems previously prepd. by the chairman. They discussed the single points in order to reach an agreement on different opinions and eventually approved the final manuscript. Some of the authors of the present review have been working in the field of cell therapy and have contributed original papers in peer-reviewed journals. In addn., the material examd. in the present review includes articles and abstrs. published in journals covered by the Science Citation Index and Medline. Lymphokine-activated killer (LAK) and tumor-infiltrating lymphocytes (TIL) have been used since the '80s mainly in end-stage patients with solid tumors, but the clin. benefits of these treatments has not been clearly documented. TIL are more specific and potent cytotoxic effectors than LAK, but only in few patients mainly in those with solid tumors such as melanoma and **glioblastoma** can their clin. use be considered potentially useful. Adoptive **immunotherapy** with donor lymphocyte infusions has proved to be effective, particularly in patients with chronic myeloid leukemia, in restoring a state of hematol. remission after leukemia relapse occurring following an allograft. The infusion of donor T-cells can also have a role in the treatment of patients with Epstein-Barr virus (EBV)-induced post-transplant lymphoproliferative disorders. However, in this regard, generation and infusion of donor T-cell lines, various specific T-cell lines or clones represents a more sophisticated and safer approach for treatment of viral complications occurring in **immunocompromized** patients. Whereas too few clin. trials have been performed so far to draw any firm conclusion, based on animal studies dendritic cell-based **immunotherapy** holds promises of exerting an effective anti-tumor activity. Despite dendritic cells not being **immunogenic**, induction on their surface of co-stimulatory mols. or generation of leukemic dendritic cells may induce antileukemic cytotoxic T-cell **responses**. Tumor cells express a variety of antigens and can be genetically manipulated to become **immunogenic**. The main in vitro and in vivo functional characteristics of marrow mesenchymal stem cells (MSCs) with particular emphasis on their hematopoietic regulatory role are reviewed. In addn., prerequisites for clin. applications using culture-expanded mesenchymal cells are discussed. The opportuneness of using LAK cells or activated natural killer (NK) cells in hematol. patients with low tumor burden beg. after stem cell **transplantation** should be further explored. Moreover the role of new cytokines in enhancing the antineoplastic activity of NK cells and the infusion of selected NK as alternative to CTL for **graft vs. leukemia** (GVL) disease (avoiding **graft vs. host** disease (GVHD)) seems very promising. Sepn. of GVL from GVHD through generation and infusion of leukemia-specific T-cell clones or lines is one of the most intriguing and promising fields of investigations for the future. Like-wise, strategies devised to improve **immune**-reconstitution and restore specific anti-infectious functions through either induction of unresponsiveness to recipient alloantigens or removal of alloreactive donor T-cells might increase the applicability and success of hematopoietic stem cell **transplantation**. Cellular **immunotherapy** with DC must be standardized and several points, discussed in the chapter, have to be properly addressed with specific clin. studies. Stimulation of leukemic cells via CD41 receptor and transduction of tumor cells with co-stimulatory mols. and/or cytokines may be useful to prevent a tumor escaping **immune** surveillance. Tumor cells can be genetically modified to interact directly with dendritic cells in vivo or recombinant antigen can be delivered to dendritic cells using attenuated bacterial vectors for oral vaccination. MSCs represent an attractive therapeutic tool capable of playing a role in a wide range of clin. applications in the context of both cell and gene therapy strategies.

ST review hematopoietic cell immunotherapy **transplant**

- IT Lymphoproliferative disorders  
(Epstein-Barr virus-induced posttransplant; cell therapy: achievements and perspectives)
- IT Immunostimulants  
(adjuvants; cell therapy: achievements and perspectives)
- IT **Transplant and Transplantation**  
(allotransplant; cell therapy: achievements and perspectives)
- IT **Dendritic cell**  
Gene therapy  
Hematopoietic precursor cell  
Human herpesvirus 4  
Immunodeficiency  
Immunotherapy  
Melanoma  
T cell (lymphocyte)  
(cell therapy: achievements and perspectives)
- IT Cytokines  
Lymphokines  
RE: BCU (Biological study, unclassified; BIDL (Biological study)  
(cell therapy: achievements and perspectives)
- IT **Neuroglia**  
(glioblastoma; cell therapy: achievements and perspectives)
- IT **Transplant and Transplantation**  
(graft-vs.-host reaction; cell therapy: achievements and perspectives)
- IT Lymphocyte  
(killer cell; cell therapy: achievements and perspectives)
- IT Bone marrow  
(mesenchymal stem cell; cell therapy: achievements and perspectives)
- IT Leukemia  
(myelogenous; cell therapy: achievements and perspectives)
- IT Neoplasia  
(solid; cell therapy: achievements and perspectives)
- IT Mesenchyme  
(stem cell, bone marrow; cell therapy: achievements and perspectives)
- IT Lymphocyte  
(tumor-infiltrating; cell therapy: achievements and perspectives)

RE.CNT 336 THERE ARE 336 CITED REFERENCES AVAILABLE FOR THIS RECORD

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TI Chemokines as adjuvants of **immune response**

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SO Eur. Pat. Appl., 16 pp.

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DT Patent

LA English

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CC 1.-5 Immunochimistry)

Section cross-reference(s): 3, 63

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|      | PATENT NO.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | IND. | DATE     | APPLICATION NO. | DATE     |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|----------|
| PI   | EP 874857                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | A1   | 20000116 | EP 1998-401799  | 19980716 |
|      | FI: AE, BE, CH, DE, EF, ES, FF, GE, GF, HI, LI, LU, NE, SE, MC, PT, IE, FI, LT, LV, FI, FG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |      |          |                 |          |
|      | WO 200001729                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | A1   | 20000117 | WO 1999-US14148 | 19990715 |
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|      | BW: CH, CH, EE, ES, EW, FI, SL, SZ, US, EW, AT, BE, CH, CY, DE, DK, EE, FI, FF, GE, GF, HI, IT, LU, MD, NI, PT, SE, BF, BJ, CF, CG, FI, HI, GR, GN, HW, ME, NE, SN, TI, TG                                                                                                                                                                                                                                                                                                                                                                                                                                                         |      |          |                 |          |
|      | AU 644061                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | A1   | 20000117 | AU 1999-49591   | 19990715 |
|      | US 200001449                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | A1   | 20000117 | US 2001-768917  | 20010124 |
|      | WO 200001729                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | A2   | 20000117 | WO 2001-US1849  | 20010124 |
|      | W: AE, AG, AL, AM, AT, AU, BA, BB, BC, BE, BY, BG, CA, CH, CN, DE, EE, EG, FI, GE, GF, HI, ID, IL, IN, IS, JP, KG, KR, LC, LI, LF, LG, LT, LU, LV, MA, ME, MF, MN, MX, NC, NZ, PL, PT, RO, RU, SG, SI, SK, SL, TG, TH, TF, TT, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, FI, FI, GR, GU, HI, ME, NE, SN, TI, TG                                                                                                                                                                                                                                                                                                                          |      |          |                 |          |
|      | BW: CH, CH, EE, ES, EW, FI, SL, SZ, US, EW, AT, BE, CH, CY, DE, DK, EE, FI, FF, GE, GF, HI, IT, LU, MD, NI, PT, SE, BF, BJ, CF, CG, FI, HI, GR, GN, HW, ME, NE, SN, TI, TG                                                                                                                                                                                                                                                                                                                                                                                                                                                         |      |          |                 |          |
| PRAI | EP 1998-401799                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | A    | 19980716 |                 |          |
|      | WO 1999-014148                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | W    | 19990715 |                 |          |
|      | US 2001-068917                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | A    | 20010124 |                 |          |
| AB   | Dendritic cells play a crit. role in antigen-specific <b>immune responses</b> . Materials and methods are provided for treating disease states, including cancer and autoimmune disease, by facilitating or inhibiting the migration or activation of <b>antigen-presenting</b> dendritic cells. In particular, chemokines are used to initiate, amplify or modulate an <b>immune response</b> . In one embodiment, chemokines are used to attract dendritic cells to the site of antigen delivery. An increase no. of dendritic at the site of antigen delivery means more antigen uptake and a modified <b>immune response</b> . |      |          |                 |          |
| ST   | chemokine cytokine immune adjuvant antigen vaccine; cancer autoimmune disease infection <b>graft rejection</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |          |                 |          |
| IT   | Nucleic acid.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      |          |                 |          |
|      | FL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (SpG not a contg.; chemokines as adjuvants for inducing antigen-specific <b>immune response</b> )                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |      |          |                 |          |
| IT   | chemokines                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |      |          |                 |          |
|      | FL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |      |          |                 |          |

(DC tactivin .beta.; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Chemokines  
 FL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (MDC (macrophage-derived chemokine); chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Mucins  
 FL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (MUC 2; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Mucins  
 FL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (MUC 3; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Mucins  
 FL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (MUC 4; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Antigens  
 FL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (MUC16; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Cytokines  
 FL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (RIF-165; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Chemokines  
 FL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (SIF-1 (stromal-derived factor-1); chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Chemokines  
 FL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 Teck; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Immunostimulants  
 adjuvants; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Antibodies  
 FL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (anti-CD40; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Immunity  
 (antigen-specific; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Animal virus  
 Bacteria (Eubacteria)  
 Fungi  
 (antigen; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Infection  
 (bacterial; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Allergy  
 Antigen presentation  
 Autoimmune disease  
 Cell migration  
 Dendritic cell  
 Eye, neoplasm  
 Genetic vectors  
 Intestine, neoplasm  
 Kidney, neoplasm  
 Liver, neoplasm  
 Lung, neoplasm

Melanoma  
 Neoplasm  
 Ovary, neoplasm  
 Pancreas, neoplasm  
 Stomach, neoplasm  
 Testis, neoplasm  
 Thyroid gland, neoplasm

**Transplant rejection**

(chemokines as adjuvants for inducing antigen-specific **immune response**)

- IT CD40 (antigen)  
 PL: ESJ (Biological study, unclassified); BIOL (Biological study)  
 (chemokines as adjuvants for inducing antigen-specific **immune response**)
- IT Anticells  
 PL: ESJ (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (chemokines as adjuvants for inducing antigen-specific **immune response**)
- IT Carcinoembryonic antigen  
 Chemokines  
 Cytokines  
 Hepatocyte growth factor receptors  
 Interleukin 4  
 Macrophage inflammatory protein 1.alpha.  
 Macrophage inflammatory protein 1.beta.  
 Prostate-specific antigen  
 RANTES (chemokine)  
 Tumor necrosis factors  
 alpha.-Fetoproteins  
 PL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (chemokines as adjuvants for inducing antigen-specific **immune response**)
- IT Intestine, neoplasm  
 (colon; chemokines as adjuvants for inducing antigen-specific **immune response**)
- IT Intestine, neoplasm  
 (colorectal; chemokines as adjuvants for inducing antigen-specific **immune response**)
- IT Uterus, neoplasm  
 (endometrium; chemokines as adjuvants for inducing antigen-specific **immune response**)
- IT Mucins  
 PL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (episialins; chemokines as adjuvants for inducing antigen-specific **immune response**)
- IT Neuroglia  
 (glioblastoma; chemokines as adjuvants for inducing antigen-specific **immune response**)
- IT Neuroglia  
 (glioma; chemokines as adjuvants for inducing antigen-specific **immune response**)
- IT Glycoproteins, specific or class  
 PL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (gp100; chemokines as adjuvants for inducing antigen-specific **immune response**)
- IT Sialoglycoproteins  
 PL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (gp75; chemokines as adjuvants for inducing antigen-specific **immune response**)
- IT Liver, neoplasm  
 (hepatoma; chemokines as adjuvants for inducing antigen-specific **immune response**)

- IT Parasite  
(infection; chemokines as adjuvants for inducing antigen-specific **immune response**)
- IT Drug delivery systems  
(injections, i.m.; chemokines as adjuvants for inducing antigen-specific **immune response**)
- IT Drug delivery systems  
(injections, s.c.; chemokines as adjuvants for inducing antigen-specific **immune response**)
- IT Drug delivery systems  
(intradermal; chemokines as adjuvants for inducing antigen-specific **immune response**)
- IT Organ, animal  
(lymphoid; chemokines as adjuvants for inducing antigen-specific **immune response**)
- IT Chemokines  
FL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(macrophage inflammatory protein, 3.alpha.; chemokines as adjuvants for inducing antigen-specific **immune response**)
- IT Antigens  
FL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(melanoma-associ., high mol. wt.; chemokines as adjuvants for inducing antigen-specific **immune response**)
- IT Antigens  
FL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(melanoma-associ., melan A; chemokines as adjuvants for inducing antigen-specific **immune response**)
- IT Antigens  
FL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(melanoma-associ.; chemokines as adjuvants for inducing antigen-specific **immune response**)
- IT Transferrins  
FL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(melanotransferrins; chemokines as adjuvants for inducing antigen-specific **immune response**)
- IT Carcinoma  
(metastatic; chemokines as adjuvants for inducing antigen-specific **immune response**)
- IT Chemokines  
FL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(monocyte chemoattractant protein 3; chemokines as adjuvants for inducing antigen-specific **immune response**)
- IT Cytokines  
FL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(monocyte chemoattractant protein 4; chemokines as adjuvants for inducing antigen-specific **immune response**)
- IT Bladder  
Esophagus  
Head  
Mammary gland  
Neck, anatomical  
Prostate gland  
(neoplasm; chemokines as adjuvants for inducing antigen-specific **immune response**)
- IT Drug delivery systems  
topical; chemokines as adjuvants for inducing antigen-specific **immune response**)
- IT Antigens  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(tumor-associ., DDC; chemokines as adjuvants for inducing antigen-specific **immune response**)
- IT Antigens  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

IT    Antigen:  
       FL: THU (Therapeutic use); BIL (Biological study); USES (Uses)  
          (tumor-associated, MAGE-12; chemokines as adjuvants for inducing  
          antigen-specific immune response)

IT Antigens  
FL: THU (Therapeutic use); BICL (Biological study); USES (Uses)  
(tumor-assocd., MAGE-1; chemokines as adjuvants for inducing  
antigen-specific **immune response**)

IT Antigens  
 FL: THU (Therapeutic use; BIL Biological study; USES (Uses)  
 (tumor-ass. ad., MAGE-1; chemokines as adjuvant; for inducing  
 antigen-specific immune response)

IT Antigen:  
IL: THU (Therapeutic use ; BIL Biological study ; USES (Uses)  
(tumor-asso'd., MAGE-3; chemokines as adjuvant. for inducing  
antigen-specific immune response)

IT Antigen.  
IL: THU (Therapeutic use; BIL: Biological study; USES (Uses)  
(tumor-asscd., MAGE-1; chemokines as adjuvants for inducing  
antigen-specific immune response)

IT   Antigens:  
 EL: THU (Therapeutic uses); BIL (Biological study); USES (Uses)  
 (tum.r-asscd., MART-1; chemokines as adjuvants for inducing  
 antigen-specific immune response;

IT Antigens  
 :L: THU (Therapeutic use); BIL (Biological study); USES (Uses)  
 (tumor-associated, Tyrl; chemokines as adjuvants for inducing  
 antigen-specific immune response)

IT Antigens  
FL: THU (Therapeutic use); BIL (Biological stud.); USES (Uses)  
(tumor-associated, Tyr2; chemokines as adjuvants for inducing  
antigen-specific immune response)

IT Antigens  
FL: THC (Therapeutic use); BIL (Biological study); USES (Uses)  
(tumor-assocd., K19; chemotines as adjuvants for inducing  
antigen-specific immune response

IT Antigens:  
EL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(tumor-associated, pMEL 17; chemokines as adjuvants for inducing  
antigen-specific immune response.

IT Antigen.  
EL: THU (Therapeutic use); BIL (Biological study); USES (Uses)  
(tumor-associ., prostate specific membrane antigen; chemokines as  
adjuvants for inducing antigen-specific **immune**  
**response**)

IT Antigen:  
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL  
(Biological study); USES (Used)  
tumor-assoed.; chemokines as adjuvants for inducing antigen-specific  
**immune response)**

IT Infection  
(viral; chemokines as adjuvants for inducing antigen-specific  
immune response)

IT 9002-10-2, Tyrosinase 9002-51-3 9031-18-1, Tyroperoxidase  
14215-68-0, 2-Alpha-L-N-Acetylgalactosamine 83-69-56-1, GM-CSF  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(chemokines as adjuvants for inducing antigen-specific immune  
response)

RE.CNT 4 THESE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

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 (4) Univ Texas; WD 94075.1 A 1994 HCAPLUS

L75 ANSWER 7 OF 13 HCAPLUS COPYRIGHT 2003 A13

AN 1999:736887 HCAPLUS

DN 132:48718

TI Development of systemic immunity to **glioblastoma** multiforme using tumor cells genetically engineered to express the membrane-associated isoform of macrophage colony-stimulating factor

AD Graf, Martin R.; Jandus, Martin R.; Hiscott, John C.; Wepsic, H. Terry; Granger, Gale A.

CS Departments of Molecular Biology and Biochemistry, University of California, Irvine, CA, 92697, USA

SO Journal of Immunology (1999), 163(10), 5544-5551

CIDEM: JOIMAB; ISSN: 0022-1767

PB American Association of Immunologists

DT Journal

LA English

CC 15-2 (Immunochemistry)

AB We investigated the ability of Fischer rat T9 **glioblastoma** cells transduced with cDNA genes for the secreted (s) or membrane-assocd. (m) isoform of M-CSF to elicit an antitumor **response** when implanted into syngeneic animals. Intracranial (i.c.) implantation of 1.times.10<sup>5</sup> T9 cells expressing mM-CSF (T9/mM-CSF) resulted in 80% tumor rejection. Electron microscopy of the T9/mM-CSF tumor site, 2-4 days postimplantation, showed marked infiltration by macrophages, many of which were in phys. contact with the T9/mM-CSF cells. Animals that rejected T9/mM-CSF cells were resistant to i.c. rechallenge with T9 cells, but not syngeneic MABP106 breast adenocarcinoma cells, suggesting that T9-specific **immunity** can be generated within the brain via the endogenous APCs. Intracranial injection of parental T9, vector control (T9/LXSN), or T9 cells secreting M-CSF (T9/sM-CSF) was 100% fatal. S.c. injection of 1.times.10<sup>5</sup> T9/sM-CSF, T9/LXSN, or parental T9 cells resulted in progressive tumors. In contrast, T9/mM-CSF cells injected s.c. were destroyed in 7-10 days and animals developed systemic **immunity** to parental T9 cells. Passive transfer of CD3+ T cells from the spleens of **immune** rats into naive recipients transferred T9 glioma-specific **immunity**. In vitro, splenocytes from T9/mM-CSF-immunized rats specifically proliferated in **response** to various syngeneic glioma stimulator cells. However, only marginal T cell-mediated cytotoxicity was med. by these splenocytes in a CTL assay against T9 target cells, regardless of restimulation with T9 cells. **immunization** with viable T9/mM-CSF cells was effective in eradicating i.c. T9 tumors.

ST vaccine **glioblastoma** multiforme MCSF macrophage T lymphocyte

IT Gen., animal

EL: BPR (Biological process); BSU (Biological study, unclassified); (Biological study); ERO (Process)

CSF-1, membrane-assocd. isoform; development of systemic immunity

**glioblastoma** multiforme using tumor cells genetically engineered to express the membrane-assocd. isoform of M-CSF

IT Genetic engineering

Immunization

Macrophage

T cell (lymphocyte)

Vaccines

(development of systemic immunity to **glioblastoma** multiforme

using tumor cells genetically engineered to express the

membrane-assocd. isoform of M-CSF)

IT Neuroglia

Neuroglia

(**glioblastoma** multiforme, inhibitors; development

of systemic immunity to **glioblastoma multiforme**  
using tumor cells genetically engineered to express the  
membrane-associated isoform of M-CSF)

IT Antitumor agents

(**glioblastoma multiforme**; development of systemic immunity to  
**glioblastoma multiforme** using tumor cells genetically  
engineered to express the membrane-associated isoform of M-CSF)

IT Antigens

RL: B6F (Biological process); B6F (Biological study, unclassified); BIOL  
(Biological study); PRM (Process)

(tumor-associated; development of systemic immunity to  
**glioblastoma multiforme** using tumor cells genetically  
engineered to express the membrane-associated isoform of M-CSF)

IT 81627-83-0, Colony-stimulating factor 1

RL: B6F (Biological process); B6F (Biological study, unclassified); MFM  
(Metabolic formation); BIOL (Biological study); FORM (Formation,  
nonpreparative); H (Histochemistry)

(membrane-associated isoform; development of systemic immunity to  
**glioblastoma multiforme** using tumor cells genetically  
engineered to express the membrane-associated isoform of M-CSF)

RE.CNT 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD

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L75 ANSWER = CF 13 HCAPLUS COPYRIGHT 2003 ACS

AN 1999:468593 HCAPLUS

DN 131:101258

TI Materials and methods for treating oncological disease

IN Lawman, Patricia; Lawman, Michael J. P.

PA Morphogenesis, Inc., USA

SO PCT Int. Appl., 37 pp.

ORDEN: PIXXD

DT Patent

LA English

IC ICM CO/K014-00

CC 15-1 (Immunohistochemistry)

Section cross-reference(s): 3

FAN.CNT 1

|      | PATENT NO.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | KIND | DATE     | APPLICATION NO. | DATE     |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|----------|
| PI   | WO 1999-04333                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | A2   | 19990722 | WO 1999-04333   | 19990114 |
|      | WO 1999-04333                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | A3   | 19990923 |                 |          |
|      | W: CA, JP, US                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |      |          |                 |          |
|      | FW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |      |          |                 |          |
|      | US 2001-014931                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | A1   | 20011003 | US 2001-014931  | 20010910 |
| PRAI | US 1998-01497P                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | P    | 19980114 |                 |          |
|      | WO 1999-04333                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | A1   | 19990114 |                 |          |
|      | US 1999-034226                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | B1   | 19990913 |                 |          |
| AB   | <p>Novel methods are disclosed for treating oncol. disorders in an individual or animal using a superantigen expressed in tumor cells. A gene encoding a superantigen, such as an M-like protein of group A streptococci, can be introduced into a tumor cell in order to make the tumor cell more <b>immunogenic</b> in the host. Also contemplated are methods wherein a cell expresses a superantigen or superantigens, and <b>immunogenic</b> or <b>immunostimulatory</b> proteins, such as foreign MHC, cytokines, porcine-derived hyperacute rejection antigen, Mycobacterium-derived antigens, and the like. The subject invention also pertains to cells transformed with polynucleotides encoding a superantigen and foreign MHC antigen, cytokines, and other <b>immunogenic</b> or <b>immunostimulatory</b> proteins. Transformed cells according to the subject invention are then provided to an individual or animal in need of treatment for an oncol. disorder. The <b>immune response</b> to tumor cells transformed according to the present invention inhibits in vivo tumor growth and results in subsequent tumor regression. The subject invention also pertains to cell lines transformed with genes encoding a superantigen and, optionally, a foreign Class II MHC antigen and/or a cytokine.</p> |      |          |                 |          |
| ST   | oncol disease superantigen transformed tumor cell; MHC cytokine superantigen immunogen cancer therapy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      |          |                 |          |
| IT   | Proteins, specific or class                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |      |          |                 |          |
|      | FL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BIDL (Biological study); PREP (Preparation); USES (Uses)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |      |          |                 |          |
|      | (M-like; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |      |          |                 |          |
| IT   | Histocompatibility antigens                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |      |          |                 |          |
|      | FL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |      |          |                 |          |

- THU (Therapeutic use); BICL (Biological study); PREP (Preparation); USES (Uses)  
(MHC (major histocompatibility complex), class I; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)
- IT Histocompatibility antigens  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BICL (Biological study); PREP (Preparation); USES (Uses)  
(MHC (major histocompatibility complex), class II, -IIE; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)
- IT Histocompatibility antigens  
FL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BICL (Biological study); PREP (Preparation); USES (Uses)  
(MHC (major histocompatibility complex), class II; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)
- IT Histocompatibility antigens  
FL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BICL (Biological study); PREP (Preparation); USES (Uses)  
(MHC (major histocompatibility complex), class III; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)
- IT Histocompatibility antigens  
FL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BICL (Biological study); PREP (Preparation); USES (Uses)  
(MHC (major histocompatibility complex); transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)
- IT Kidney, neoplasm  
(Wilms'; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)
- IT Mycobacterium  
(antigen; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)
- IT Neuroglia  
(glioblastoma; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)
- IT Neuroglia  
(glioma; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)
- IT Liver, neoplasm  
(hepatoma; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)
- IT Antigens  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BICL (Biological study); PREP (Preparation); USES (Uses)  
(hyperacute rejection; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)
- IT Proteins, specific or class  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BICL (Biological study); PREP (Preparation); USES (Uses)  
(immunostimulatory; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)
- IT Brain, neoplasm  
(medulloblastoma; transformed tumor cells encoding a superantigen and a

- bacterial or eukaryotic protein for treating oncol. disease)
- IT Nerve, neoplasm  
(neuroblastoma; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)
- IT Nucleic acids  
EL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(single- or double-stranded; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)
- IT Antigens  
EL: BEN (Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(superantigens; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)
- IT Adeno-associated virus  
Adenoviridae  
Antitumor agents  
Bacteria (Eubacteria)  
Brain, neoplasm  
Carcinoma  
Chemotherapy  
DNA sequences  
**Dendritic cell**  
Domestic animal  
Eukaryote (Eukaryotae)  
Genetic vectors  
Herpesviridae  
Leukemia  
Liposomes  
Lymphoma  
Melanoma  
Neoplasm  
Plasmids  
Retroviridae  
Radiotherapy  
Retroviridae  
Sarcoma  
Streptococcus group A  
Surgery  
Swine  
Virus  
(transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)
- IT Antigens  
Cytokines  
DNA  
Gene, animal  
Gene, microbial  
Interleukin 1  
Interleukin 2  
Interleukin 3  
Interleukin 4  
Macrophage inflammatory protein 1.alpha.  
Macrophage inflammatory protein 1.beta.  
Polynucleotides  
Tumor necrosis factors  
EL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)

- IT Antibodies  
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)
- IT Vaccines  
(tumor; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)
- IT Antitumor agents  
-vaccines; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)
- IT Transforming growth factors  
FL: BPN (Biosynthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
.beta.-; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)
- IT Interferons  
FL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
.beta.-; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)
- IT Interferons  
FL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
.gamma.-; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)
- IT 230475-03-8  
FL: PREP (Properties)  
nucleotide sequence; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)
- IT 230475-56-1P, GM-CSF  
FL: BPN (Biosynthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)

L75 ANSWER 9 OF 13 HCAPLUS COPYRIGHT 2003 ACS

AN 1999:257595 HCAPLUS

DN 131:57611

TI Human glioma-induced immunosuppression involves soluble factor(s) that alters monocyte cytokine profile and surface markers

AU Zou, Jian-Ping; Morford, Lorri A.; Chougnet, Claire;  
Dix, Amy E.; Brooks, Andrew G.; Torres, Ricard; Shuman, Jon D.;  
Coligan, John E.; Brooks, William H.; Rowman, Thomas L.;  
Shearer, Gene M.

CS Experimental Immunology Branch, National Cancer Institute, National Institutes of Health, Bethesda, MD, 20892, USA

SO Journal of Immunology (1999) 162(8), 4632-4642

CODEN: JOIMAS; ISSN: 0022-1767

PB American Association of Immunologists

DI Journal

LA English

CC 15-5 (Immunochimistry)

AB Patients with glioma exhibit deficient in vitro and in vivo T cell immune activity, and human glioblastoma culture supernatants (GCS) inhibit in vitro T lymphocyte responses. Because APC are essential for initiating and regulating T cell responses, we investigated whether GCS would affect cytokines produced by monocytes and T cells from healthy donors of PBMC. Incubation of PBMC with GCS decreased prodn. of IL-12, IFN-.gamma., and TNF-.alpha., and increased prodn. of IL-6 and IL-10. The GCS-induced changes in IL-12

and IL-10 occurred in monocytes, and involved changes in IL-12 p40 and IL-10 mRNA expression. Incubation with GCS also resulted in reduced expression of MHC class II and of CD80/86 costimulatory molcs. on monocytes. The **immunosuppressive** effects were not the result of IL-6 or TGF-beta.1 that was detected in GCS. However, it was due to a factor(s) that is resistant to pH extremes, differentially susceptible to temp., susceptible to trypsin, and has a min. mol. mass of 40 kDa. Our findings show that **glioblastoma**-generated factor(s) that are known to suppress T cell **responses** alter the cytokine profiles of monocyteic **APC** that, in turn, inhibit T cell function. This model indicates that monocytes can serve as an intermediate between tumor-generated **immune**-suppressive factors and the T cell **responses** that are suppressed in gliomas.

- ST glioma immunosuppression immunosuppressive factor monocyte cytokine  
IT Histocompatibility antigens  
FL: BOC (Biological occurrence); BSU (Biological study, unclassified);  
BIOL (Biological study); OCCU (Occurrence)  
(MHC (major histocompatibility complex), class II; human glioma-induced immunosuppression involves sol. factors that alter monocyte cytokine profile and surface markers)
- IT **Neuroglia**  
glioblastoma; human glioma-induced immunosuppression involves sol. factors that alter monocyte cytokine profile and surface markers)
- IT Neuroglia  
glioma; human glioma-induced immunosuppression involves sol. factors that alter monocyte cytokine profile and surface markers
- IT Immunosuppression  
**Monocyte**  
(human glioma-induced immunosuppression involves sol. factors that alter monocyte cytokine profile and surface markers)
- IT CD80 antigen  
CD86 antigen  
FL: BOC (Biological occurrence); BSU (Biological study, unclassified);  
BIOL (Biological study); OCCU (Occurrence)  
(human glioma-induced immunosuppression involves sol. factors that alter monocyte cytokine profile and surface markers)
- IT Interleukin 10  
FL: BSU (Biological study, unclassified); MEM (Metabolic formation); BIOL (Biological study); FFM (Formation, nonpreparative)  
(human glioma-induced immunosuppression involves sol. factors that alter monocyte cytokine profile and surface markers)
- IT Interleukin 12  
FL: BSU (Biological study, unclassified); MEM (Metabolic formation); BIOL (Biological study); FFM (Formation, nonpreparative)  
(human glioma-induced immunosuppression involves sol. factors that alter monocyte cytokine profile and surface markers)
- IT Interleukin 6  
FL: BSU (Biological study, unclassified); MEM (Metabolic formation); BIOL (Biological study); FFM (Formation, nonpreparative)  
(human glioma-induced immunosuppression involves sol. factors that alter monocyte cytokine profile and surface markers)
- IT Tumor necrosis factors  
FL: BSU (Biological study, unclassified); MEM (Metabolic formation); BIOL (Biological study); FFM (Formation, nonpreparative)  
(human glioma-induced immunosuppression involves sol. factors that alter monocyte cytokine profile and surface markers)
- IT T cell (lymphocyte)  
(human glioma-induced immunosuppression involves sol. factors that alter monocyte cytokine profile and surface markers in relation to)
- IT cytokines  
FL: EAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(immunosuppressive; human glioma-induced immunosuppression involves sol. factors that alter monocyte cytokine profile and surface markers)

IT Interferons

PL: PSU (Biological study, unclassified); MEM (Metabolic formation); BIOL (Biological study); FPM (Formation, preparative)

(gamma.; human glioma-induced immunosuppression involves sol. factors that alter monocyte cytokine profile and surface markers)

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L75 ANSWER 10 OF 13 HCAPLUS COPYRIGHT 2003 ACS

AN 1998:100114 HCAPLUS

DN 1998:100114

TI Human **glioblastoma** cell line 86HG39 activates T cells in an antigen specific major histocompatibility complex class II-dependent manner

AU Daubener, Walter; Tennati, Samira Seghrouchni; Wernet, Peter; Bilzer, Thomas; Fischer, Hans Georg; Hadding, Ulrich

CS Inst. Med. Mikrobiol. Virol., Heinrich-Heine-Univ., Duesseldorf, D-4000, Germany

SO Journal of Neuroimmunology (1998), 11(1), 21-8

ORDEN: JNSBIDW; ISSN: 0165-5728

DF Journal

LA English

CC 18-10 (Immunohistochemistry)

AB The capacity of 3 different human **glioblastoma** cell lines to activate human T cells was analyzed by measuring major histocompatibility complex (MHC) antigen expression, monokine secretion, and lectin, monoclonal antibody (mAb) OKT3, and antigen-driven T cell proliferation. All **glioblastoma** cells tested were able to induce PHA and Con A-driven T cell proliferation in a dose-dependent fashion, while all failed to induce T cell activation with mAb OKT3. In addn., the **glioblastoma** cell line 86HG39 induced tetanus toxoid and toxoplasma lysate antigen-specific T cell proliferation. The responding T cell lines originated from only 1 out of 5 different **donors**. This foreign antigen-specific T cell proliferation induced by 86HG39 cells was inhibited with mAb L243 directed against HLA-DR mols. Study of monokine secretion by 86HG39 cells showed a strong interleukin (IL)-6 secretion after lipopolysaccharide (LPS) treatment, while no IL-1 secretion was obsd. Furthermore, only 86HG39 cells were pos. for HLA-DR mols., whereas interferon (IFN)-gamma treatment of 37HG28 and 37HG31 cells was necessary for the induction of class II antigen expression. Thus, cell line 86HG39 shows many features of an **antigen presenting cell** and the interaction of these cells with MHC compatible human T cells might be a useful model to study cellular immune reactions within the central nervous system.

ST **glioblastoma** T lymphocyte antigen presentation HLA

IT Animal cell line

(86HG39, antigen-specific T-cell activation by human, class II antigen-dependent, antigen presentation in relation to)

IT Antigens

FL: PROC (Process)

(presentation of, by human **glioblastoma** cell line)

IT Histocompatibility antigens

FL: BIOL (Biological study)

(HLA, class II, **glioblastoma** cell line activation of human antigen-specific T-cells dependent on, antigen presentation in relation to)

IT Histocompatibility antigens

FL: BIOL (Biological study)

(HLA-DR, **glioblastoma** cell line activation of human antigen-specific T-cells dependent on, antigen presentation in relation to)

IT Lymphocyte

(T-cell, activation of human antigen-specific, by **glioblastoma**

cell line, class II antigen-dependent, antigen presentation in relation to)

- IT Lymphotoxins and Cytokines  
PL: PROC (Process)  
Interleukin 1, secretion of, by antigen-presenting **glioblastoma** cell line, of humans)
- IT Lymphotoxins and Cytokines  
PL: BIOL (Biological study)  
Interleukin 6, secretion of, lipopolysaccharide induced, by antigen-presenting **glioblastoma** cell line, of humans)
- IT **Neuroglia**  
Neoplasm, **glioblastoma**, antigen-specific T-cell activation by cell line of human, class II antigen-dependent, antigen presentation in relation to)
- IT 140: 3-64-6  
PL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
Human **glioblastoma** cell line 86HG39 activates T cells in antigen-specific major histocompatibility complex class II-dependent manner)

L75 ANSWER 11 OF 13 HCAPLUS COPYRIGHT 2003 ACS

AN 1990:629106 HCAPLUS

DN 113:229106

TI Adult human glial cells can present target antigens to HLA-restricted cytotoxic T-cells

AU Phil-Jalbut, Suhayl; Kufta, Conrad V.; Flerlage, Marjorie; Shimojo, Naoki; McFarland, Henry F.

CS Neurol Immunol. Branch, Natl. Inst. Neurol. Disord. Stroke, Bethesda, MD, 20892, USA

SO Journal of Neuroimmunology (1990), 29(1-3), 203-11

ADEN: JNRIW; ISSN: 0165-5728

BT Journal

LA English

CC 15-2 (Immunochimistry)

AB T-lymphocyte recognition of antigen either on **antigen-presenting cells** (APC) necessary for the generation of an **immune response** or on target cells during the effector phase of a cellular **immune response** requires expression of HLA mols. Although **immune** mechanisms operate in many disease processes of the central nervous system (CNS), cells of the CNS generally express low levels of HLA mols. In this study, the potential for upregulation of HLA mols. on adult human glial cells was examined. The functional implication of this upregulation was assessed by the capacity of glial cells to process and present target antigens to HLA class I-restricted influenza-specific and class II-restricted **myelin basic protein (MBP)**-specific CTL lines. Glial cells cultured from adult human surgical brain specimens or cells from established **glioblastoma** multiforme cell lines were studied. Lysis by antigen-specific CTLs was dependent on treatment of the target cell with interferon-gamma. The lysis was HLA restricted and antigen specific. The results indicate that adult human glial cells can process and present antigen to HLA-restricted CTLs but require the upregulation of HLA mols. These findings have implications for infectious and autoimmune diseases of the CNS.

ST glia **antigen presentation** cytotoxic T lymphocyte

IT Neur glia  
(target **antigen presentation** by, to cytotoxic T lymphocyte, HLA antigen restriction in)

IT Antigens

PL: BIOL (Biological study)

(target, presentation of, by glial cells to cytotoxic T cells)

IT Antigens



- PL: BIOL (Biological study)  
(HLA, restriction by, in glial cell presentation of target antigens to cytotoxic T cells)
- IT **Phospholipoproteins**  
EL: BIOL (Biological study)  
(**MBP (myelin basic protein)**, cytotoxic T cells specific for, glial cells presentation of antigen to)
- IT Lymphocyte  
(T-, cytotoxic, target **antigen presentation** to, by glial cells, HLA restriction in)
- IT Virus, animal  
(influenza, cytotoxic T cells specific for, glial cells presentation of antigen to)
- IT Interferons  
EL: BIOL (Biological study)  
(gamma., target cell lysis by antigen-specific cytotoxic T lymphocyte dependent on)

L75 ANSWER 12 OF 13 HCAPLUS COPYRIGHT 2003 ACS

AN 1989:229869 HCAPLUS

DN 110:229869

TI **Glioblastoma**-cell-derived T-cell suppressor factor (G-TsF).  
Sequence analysis and biologic mechanism of G-TsF

AU Siepl, C.; Bodmer, S.; Hofer, E.; Wrana, M.; Frei, K.; Fontana, A.

CS Dep. Neurosurg., Univ. Hosp., Zurich, Switz.

SO Annals of the New York Academy of Sciences (1988), 540(Adv. Neuroimmunol.), 437-9

CODEN: ANYAA9; ISSN: 0077-8923

DT Journal

LA English

CC 15-5 (Immunochemistry)

AB It was recently demonstrated that human **glioblastoma** cell line 308 releases a factor into the culture medium, termed **glioblastoma**-derived T cell suppressor factor (G-TsF), that inhibits T cell proliferation in vitro. The similarities between the N-terminal amino acid sequences of G-TsF and some growth factors are reviewed. When tested in a helper T cell line, purified G-TsF inhibited the antigen-induced cell growth in the presence of **antigen-presenting cells**. G-TsF also directly interfered with the growth-promoting effect of interleukin 2. G-TsF may contribute to impaired immunosurveillance and to the cellular immunodeficiency detected in patients with **glioblastoma**.

ST **glioblastoma** derived T suppressor factor

IT Immunosuppression

(in **glioblastoma**, **glioblastoma**-derived T-cell suppressor factor role in, of humans)

IT Protein sequences

(of **glioblastoma**-derived T-cell suppressor factor N terminus, of humans)

IT Lymphocyte

(T-, suppressor, factor-inducing, human **glioblastoma**-derived, amino terminal sequence and biol. mechanism of human)

IT **Neuroglia**

(neoplasm, **glioblastoma**, T-suppressor factor from, amino terminal sequence and biol. mechanism of human)

IT Animal growth regulators

EL: BIOL (Biological study)

(beta.1-transforming growth factors, N-terminal sequence and biol. mechanism of human)

L75 ANSWER 13 OF 13 HCAPLUS COPYRIGHT 2003 ACS

AN 1988:421372 HCAPLUS

DN 109:21372

TI The **glioblastoma**-derived T cell suppressor factor/transforming growth factor- $\beta$ 2 inhibits T cell growth without affecting the interaction of interleukin 2 with its receptor

AU Siepl, Christine; Bodmer, Stefan; Frei, Karl; MacDonald, H. Pabson; De Martin, Rainer; Hofer, Erhard; Fontana, Adriano

CS Dep. Neurosurg., Univ. Hosp., Zurich, CH-8044, Switz.

SO European Journal of Immunology (1983), 13:4, 593-600

CI: EMBASE; ISSN: 0014-2980

DT Journal

LA English

CC 15-5 (Immunology)

AB Human **glioblastoma** cells secrete a peptide termed **glioblastoma**-derived T cell suppressor factor (G-TsF) which inhibits T cell activation. Recently, purification and cloning of G-TsF revealed that G-TsF is identical to transforming growth factor- $\beta$ 2. As shown here, G-TsF suppresses the growth of an ovalbumin-specific mouse T helper cell clone (OVA-7T), independently of the stimulus used being either (a) antigen in the presence of **antigen-presenting cells**, or (b) interleukin 2 (IL 2) or (c) phorbol ester and Ca ionophore. In the presence of antibodies against IL 2 receptors, G-TsF was able to suppress the residual proliferation still observed when OVA-7T were stimulated with phorbol ester/ionophore. G-TsF failed to inhibit the release of IL 3 from OVA-7T activated with IL 2. The data provide evidence that G-TsF does not directly interfere with interactions of IL 2 with its receptor but rather inhibits T cell activation by interfering with an as yet unidentified pathway used by both IL 2 and phorbol ester/ionophore. When analyzing different monokines and lymphokines for their effect on G-TsF-induced suppression of T cell growth, the only factor found to partially neutralize the effect of G-TsF was tumor necrosis factor- $\alpha$ .

ST **glioblastoma** T cell suppressor factor; interleukin 2 receptor T lymphocyte

IT Receptors

EL: B10L (Biological study)  
(interleukin 2 binding to, **glioblastoma**-derived T-cell suppressor factor inhibition of T-cell growth in relation to)

IT Lymphocyte  
(T-, growth of, **glioblastoma**-derived T-cell suppressor factor inhibition of, interleukin 2 binding to receptor in relation to)

IT Lymphokines and cytokines

EL: PBOC (Process)  
(interleukin 2, binding of, to receptor, in **glioblastoma**-derived T-cell suppressor factor inhibition of T-cell growth)

IT **Neuroglia**  
(neoplasm, **glioblastoma**, T-cell suppressor factor from, T-lymphocyte growth inhibition by, interleukin 2 binding to receptor in relation to)

IT Animal growth regulators

EL: B10L (Biological study)  
( $\beta$ -transforming growth factors, T-lymphocyte growth inhibition by, interleukin 2 binding to receptor in relation to)

IT Animal growth regulators

EL: SYN (Synthetic preparation); PREP (Preparation)  
( $\beta$ 2-transforming)

=> file keywords

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1102 ANSWER 1 OF 2 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
 AN 1999167116 BIOSIS  
 IN PREVIEW 19990167720  
 TI **Monocyte** mediated T-cell unresponsiveness.  
 AU Zou, A. P. (1); Morford, L. A.; Zou, J. P.; Shearer, G. M.; Brooks, W. H.; Roszman, T. L.  
 CS 1 Dep. Microbiol. Immunol., Univ. Kentucky, Lexington, KY 40536 USA  
 SO FASEB Journal, (March 12, 1999) Vol. 13, No. 4 PART 1, pp. A610.  
 Meeting Info.: Annual Meeting of the Professional Research Scientists for Experimental Biology 99 Washington, D.C., USA April 17-21, 1999  
 ISSN: 0891-6638.  
 ET Conference  
 LA English  
 CC Immunology and Immunochimistry - Immunopathology, Tissue Immunology  
 \* 4 35  
 Cytology and Cytochemistry - Human \*02503  
 Blood, Blood-Forming Organs and Body Fluids - Lymphatic Tissue and  
 Hematopoietic System \*15000  
 Nervous System - Pathology \*10500  
 Neoplasms and Neoplastic Agents - General \*24000  
 General Biology - Symposia, Transactions and Proceedings of Conferences,  
 Congresses, Review Annuals \*0550  
 EC Hematology \*6115  
 IT Major Concepts  
 Immune System (Chemical Coordination and Homeostasis); Nervous System  
 (Neural Coordination); Tumor Biology  
 IT Parts, Structures, & Systems of Organisms  
 Hematopoiesis: blood and lymphatic, immune system; T cells: blood and  
 lymphatic, immune system  
 IT Diseases  
 glioblastoma: neoplastic disease, nervous system disease;  
 immunologic defects: immune system disease  
 IT Alternate Indexing  
 Glioblastoma (MeSH)  
 IT Miscellaneous Descriptors  
 Meeting Abstract  
 CIGN Super Topic  
 Hematology: Primates, Mammalia, Vertebrata, Chordata, Animalia  
 CIGN Organism Name  
 Human (Hominidae) : patient  
 CIGN Organism Descriptors  
 Animal ; Chordates; Humans; Mammals; Primates; Vertebrates

1102 ANSWER 2 OF 2 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
 AN 1999327119 BIOSIS  
 IN PREVIEW 19990749626400  
 TI **Glioma**-derived suppressor factor (GSF) induces decreased IL-12  
 and increased IL-10 production.  
 AU Zou, J.-P. (1); Morford, L. A.; Brooks, W. H.; Chougnet, C. (1); Roszman, T. L.; Shearer, G. M. (1)  
 CS 10 Exp. Immunol. Br., National Cancer Inst., Bethesda, MD USA  
 SO Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology,  
 (1997) Vol. 14, No. 4, pp. A30.  
 Meeting Info.: National AIDS Malignancy Conference Bethesda, Maryland, USA

April 28-30, 1997

ISSN: 1077-0450.

DT Conference: Abstract

LA English

CC General Biology - Symposia, Transactions and Proceedings of Conferences, Congresses, Review Annals 00500

Endocrine System - General \*1 002

Nervous System - Pathology \*1506

Neoplasms and Neoplastic Agents - Immunology \*24003

Neoplasms and Neoplastic Agents - Biochemistry \*24006

Immunology and Immunochimistry - Immunopathology, Tissue Immunology \*34504

Medical and Clinical Microbiology - Virology \*1600

BC Homiidae \*16113

IT Major Concepts

Clinical Immunology (Human Medicine, Medical Sciences); Endocrine System (Chemical Coordination and Homeostasis); Infection; Neurology (Human Medicine, Medical Sciences); Oncology (Human Medicine, Medical Sciences)

IT Miscellaneous Descriptors

ACQUIRED IMMUNODEFICIENCY SYNDROME-ASSOCIATED MALIGNANCIES;  
AIDS-ASSOCIATED MALIGNANCIES; GLIOBLASTOMA CELL LINES;  
GLIOMA-DERIVED SUPPRESSOR FACTOR; GSF; 11-10; 11-12; IMMUNE SYSTEM;  
INTERLEUKIN-10; INTERFERON-12; NEGLASTIC DISEASE; PATIENT;  
PRODUCTION; TUMOR BIOLOGY

OFGN Super Taxa

Hominidae; Primates, Mammalia, Vertebrata, Chordata, Animalia

OFGN Organism Name

Human (Hominidae)

OFGN Organism Superterms

animals; chordates; human; mammals; primates; vertebrates

== fil wp1.x

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FILE LAST UPDATED: 29 JAN 2003 &lt;2003-129,UP&gt;

MOST RECENT DERWENT UPDATE: 200301 &lt;200301,DW&gt;

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= s 1103,1112

L114 4 (L103 OR L112)

= d all abeq tech also tot

L114 ANSWER 1 OF 4 WPX IN 1003 THOMSON DERVENT

AN 1003-54043 [01] WPX

DMN H002-155027 INC C1002-16200

TI Compositions useful for treating diseases e.g. allergy, cancer and autoimmune disease, comprises CD1 fusion proteins, preferably multivalent fusion proteins that are present in multimeric fusion form.

BO E04 C06 D16 S03

IN BEHAR, S M; BRENNER, M B; GUMPERT, J E

PA BIOGEN BRIGHAM & WOMEN'S HOSPITAL INC; (BEHA-1) BEHAR S M; (BREN-1) BRENNER M B; (GUME-1) GUMPERT J E

CYC 11

FI WO 200106494 A2 10011011 (200001) EN 88p G01N033-569

AW AT BE CH CY DE DK ES FI FF GB GR IE IT LU NC NL PT SE TF  
IN AU CA JP

AL 200101388 A 10011117 (200007) G01N033-569

US 2001013842 A1 10010613 (200007) A01P039-395

ADT WO 2001064949 A2 WO 2001-US1817; 20010605; AU 200101388 A AU 2002-13588  
10010605; US 2001-2134 A1 Provisional US 2000-209416P 20000605, US  
2001-844470 10010605

FDT AL 200101388 A Based on WO 2001-0049

PRAI US 2001-209416P 20010605; US 2001-874470 20010605

IC 1001 A01K003-395; G01N033-569

1001 G01N033-569

AB WO 2001064949 A UPAB: 10020024

NOVELTY - A composition (I) comprising:

- (a) a vaccine having an immunogen that binds to a CD1 molecule, and enhances or induces protective immunity to a condition;
- (b) a CD1 fusion protein (II) that selectively binds to the immunogen to form a CD1-presented immunogen complex (IC) that activates a cognate CD1-restricted T cell (III); and
- (c) a carrier, where (II) enhances or induces protective immunity to the condition, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) activation (M1) of antigen specific (III) for immunotherapeutic treatment of disease comprising selecting antigen specific (III) and sterily sorting the selective cells by flow cytometry;
- (2) depleting (M2) antigen specific (III) for immunotherapeutic treatment of disease comprising selecting antigen specific (III) and sterily sorting out (removing) the selective cells;
- (3) identifying (M3) an antigen recognized by a (III), comprising contacting (II) with a putative CD1 antigen under conditions to form IC, contacting the IC with a (III) under conditions to allow IC-mediated activation of the T-cell and detecting activation of the T-cell; and
- (4) identifying (M4) (III) comprising contacting IC with a putative (III) under conditions to allow complex mediated activation of the T cell and detecting the activation of the T cell.

ACTIVITY - Cytostatic; Immunosuppressive; Anti-allergic; Antibacterial; Virucide; Fungicide; Anti-inflammatory; Antiasthmatic. Test details given but no supporting data.

MECHANISM OF ACTION - Vaccine (claimed).

USE - (I) is useful for enhancing vaccine-induced acquired protective immunity to a condition such as microbial infectious disease, or to a

tumor, allergen, or an autoantigen, or for treating a condition such as infectious disease, cancer, autoimmune disorder or an allergy, where (II) is administered subsequent to administering the vaccine to enhance recall protective immunity. M1 is useful for activation of antigen specific (III) for immunotherapeutic treatment of disease, M2 is useful for depleting antigen specific (III) for immunotherapeutic treatment of disease, M3 is useful for identifying an antigen recognized by a (III) and M4 is useful for identifying (III), where M4 is also useful for detecting (III) activity in a sample where the activity is from the number of (III) as percentage of the total T cell population or a change in the number and (III) functional activity or a change in the functional activity, where detecting the activity comprises detecting the number of T cells or a change in the number by detecting number of IC containing a detectable label bound to the T cell and the functional activity is from binding of (III) to the complex, cytokine release by (III), calcium flux in (III), protein tyrosine phosphorylation in (III), phosphatidyl inositol turnover in (III) (claimed). Examples of diseases include cancers (e.g. **glioblastomas**, Wilms' tumor, leukemia) and allergies (e.g. eczema, hay fever, allergic asthma).

Dwg. 0/0

FS CPI EPI

FA AB; DCN

MC CPI: B04-B04B1; B04-B04C; B04-B04D; B04-B04H; B04-B04L; B04-F04; B04-H02;  
B04-H05C; B04-H06; B04-N03; B05-A01B; B05-B01P; B11-C08E; B12-F04A;  
B14-A01; B14-A03; B14-A04; **B14-G02A; B14-G02D;**  
B14-H01; B14-F01A; B14-H17C; B14-S11; C04-B04B1; C04-B04C; C04-B04D;  
C04-B04H; C04-B04L; C04-F04; C04-H02; C04-H05C; C04-H06; C04-N03;  
C11-C08E; C12-F04A; C14-A04; **C14-G02A; C14-G02D;**  
C14-H01; C14-F01A; C14-H17C; C14-S11; D05-H01; D05-H06; D05-H17C  
EPI: C04-B14H;

TECH UPTX: 1.002044

TECHNICAL-SC FOCUS - EE TECHNOLOGY - Preferred Composition: In (II), (III) is preferably multivalent, and the condition is, preferably an infectious disease, cancer, autoimmune disease or allergy, and so the immunogen derived is from an infectious agent preferably bacterial, viral, fungal, and a protist infectious agent, or immunogen derived from cancer cell, from a selective marker for the autoimmune disease or from an allergen. Preferred Method: In M1, the selection process comprises staining IC. The method further comprises co-stimulating a stimulatory agent, expanding the selected T-cells in culture, and then administering the expanded T-cells to a subject in need of such treatment. M2 further comprises administering the selected T-cells which are not antigen specific (III) to a subject, or attaching a toxin to the antigen specific (III) and administering the toxin-labeled cells to the subject. In M3, the contacting step is performed in vitro or in vivo, and (II) is from CD1a, CD1b, CD1c, and CD1d fusion protein, where (II) is in soluble form and is multimeric and is optionally bound to protein A which contains a detectable label for facilitating detection of the protein in either isolated or bound form e.g. immobilized on a solid support. M3 further comprises removing the antigen that is not present in IC. CD1 antigen is naturally-occurring lipid-containing molecule or synthetic molecule, and is preferably contained in or isolated from a total lipid extract of a sample from mammalian cell, plant cell, bacteria, virus, fungus, protist and a synthetic library, and more preferably derived from a mammalian cell which is contained in or derived from blood, cerebrospinal fluid, synovial fluid, tissue, urine, amniotic fluid, peritoneal fluid, and a gastric fluid sample, where the CD1 antigen is a lipid-containing molecule selected from polar lipid (e.g., a ganglioside, phospholipid), neutral lipid, glycolipid, and a lipidated protein or lipidated peptide. (III) is preferably from mouse (III) and a human (III). The detecting step comprises detecting one or more of an indicator from binding of (III) to IC, a change in cytokine release by (III), a change in calcium flux in (III), a change in protein tyrosine phosphorylation flux in (III),

phosphatidyl inositol turnover flux in M3), where detecting binding of (III) to M2 preferably comprises detecting binding of (III) to labeled (II), and the cytokine released by (III) is preferably from interferon (e.g. IFN-gamma), interleukin (e.g. IL-2, IL-4, IL-10, IL-13), tumor necrosis factor (e.g. TNF-alpha) and a chemokine. M3 further comprises contacting T-cells with costimulatory agent prior to detecting where the costimulatory agent is from an adhesion molecule (e.g. CD2), an NK complex molecule (e.g. CD161, CD94), an antibody to the T-cell receptor (e.g. an anti-CD3 antibody), a non-specific stimulator (e.g. phytohemagglutinin, PHA), concanavalin A (Con A), phorbol myristate acetate (PMA), an

**antigen-presenting cell** which does not express CD1 and a co-stimulatory molecule (e.g. CD28). In M4, M2 preferably comprises a detectable label, and a T cell is contained in a biological sample selected from one of the sample mentioned above. The activation of the T cell is detected preferably by detecting binding of the T cell to the labeled (II), where the detection step comprises detecting the labeled T cells bound to the labeled (II) by flow cytometry.

ABEX

SPERMATOCYTES - (III) is a mouse Sertoli cell, or a cell from DN1.17ES, DN1.29, SGR-15, and DN1.06 cell lines.

ADMINISTRATION - (I) is administered through oral, rectal, topical, nasal, intradermal or parenteral route. Dose is 0.1-100 (preferably 50-100) mg/kg/day.

EXAMPLE - New cDNA constructs were generated that encode human beta-2 microglobulin attached by a glycine-serine spacer peptide to the N-terminus of the extracellular domains of CD1. The C-terminus of the CD1 molecule is fused by another glycine-serine spacer peptide to the hinge and CH-CH2 domains of murine IgG1. The cDNA constructs were cloned into the pRcneo expression vector, for stable expression in mammalian cells (Hu, A. et al., Science, 249:637-641 (1990)). The fusion proteins were expressed in Chinese hamster ovary (CHO) cells, and were purified. Purified bovine brain sphingomyelin (Sph) was utilized as synthetic antigen and was tested for recognition of the fusion protein. A composition was prepared by including the synthetic antigen and a fusion protein prepared with optionally a carrier which utilized for treating diseases such as allergies and autoimmune diseases, etc.

L114 ANSWER 2 OF 4 WPIK (C) LIPS THOMSON PERWENT

AN 2001-097435 [13] WPIK

DNC 02001-090319

TI Inducing activation composition for dendritic cells in human, contains polynucleotide, viral vector, or polynucleotide derivative and polyoxy-ethylene-polyoxypropylene block copolymer.

DC A1 AGG B04 01e

IN ALAPHOV, V; GUEPIN, N; KARANOV, A V; DEMIEUX, P; VINOGRADOV, S

PA 0098-10 SUPRATES PHARMA INC

CYC 00

PI WO 01/019836-00 AD 20010108 010113 - EN 12-p C11N 00-00

BW: AT BE CH CY IE UK FA ES PT FR GE GH GU GR IF IT JP KE LU MC MW NZ NL OA PT SD SE SL TC TF TG TW

W: AE AG AL AM AT AU BA BE BF BY CA CH CN CO CR CU CZ DE DK EM ES EE EG FI GE GR GU HK HU ID IL IN IS JP KE KG KH KR LA LC LE LI LU LT LV MA MD ME MF MN MW MX NC NG NI NL NO NZ OA OB OC OD OE OF OH OI OJ OK OL OM ON OS OT OU OV OW OX OY OZ PA PB PC PD PE PF PG PH PI PJ PK PL PM PN PO PP PQ PR PS PT PU PV PW PY PZ RA RB RC RD RE RF RG RH RI RJ RK RL RM RN RO RP RS RT RU RV RW RX RY RZ SA SB SC SD SE SF SG SH SI SJ SK SL SM SN SO SP SR SS ST SU SV SW SY SZ TA TB TC TD TE TF TH TI TJ TK TL TM TN TO TP TR TT TV TW TX TY TZ UA UB UC UD UE UF UG UH UI UJ UK UL UM UN UO UP UQ UR US UV UW UX UY UZ VA VB VC VD VE VF VG VH VI VJ VK VL VM VN VO VP VQ VR VS VT VV VW VX VY VZ WA WB WC WD WE WF WG WH WI WJ WK WL WM WN WO WP WQ WR WS WT WU WV WX WY WZ

AN 2001097435 A 20010112 010012 C11N00-00

ADT WO 2001097435 AD WO 2001-001801 20010430; AU 2001074811 A AU 2001-74811 2001430

FDT A1 2001097435 A Based on WO 200103099

PRAI US 2001-200406P 20010101; US 2000-200487P 20000418

IC 21M C11N000-00

AB WO 200103099 A UPAB: 20020126

NOVELTY - An inducing activation composition for dendritic cells (DCs) in

animals comprises a polynucleotide, viral vector, or polynucleotide derivative and polyoxyethylene-polyoxypropylene block copolymer(s).

ACTIVITY - Cytostatic; Antinflammatory; Antirheumatic; Antiarthritis; Antiarteriosclerotic; Ophthalmological; Antialcoholism; Osteopathic; Dermatological; Immunosuppressive; Antiulcer; Cardiant; Cerebroprotective; Vasotropic; Virucide; Hepatotropic; Anti-HIV; Protoplastide; Tuberculostatic.

10 Days after ischemia was induced in 1 rabbit hindlimb, 500 µl of ph-VEGF 165 was formulated with 0.1 wt% of block copolymers was injected intramuscularly (I.M.) into the ischemic hindlimb muscle. After 30 days, an angiography was performed to recognize collateral vessels and histology analysis was carried out to identify capillaries. Ischemic skeletal muscle represented a promising target for gene therapy with naked plasmid DNA formulated with block copolymers. I.M. transfection of genes encoding angiogenic cytokines, particularly those that were naturally secreted by intact cells, constituted an alternative treatment strategy for patients with extensive peripheral vascular disease.

MECHANISM OF ACTION - None given.

USE - The composition is for inducing activation of dendritic cells in animals, preferably humans; increasing the level of production and infiltration for DCs in response to gene expression; and increasing the immune response and generates large amounts of DCs in vivo or in vitro (as claimed). It is also used in treating genetic diseases including rheumatoid arthritis, psoriasis, Grönha's disease, ulcerative colitis, alpha-thalassemia, beta-thalassemia, carbonic anhydrase II deficiency syndrome, triosephosphate isomerase deficiency syndrome, tetrahydrobiopterin deficient hyperphenylalaninemia, classical phenylketonuria, muscular dystrophy such as Duchenne Muscular Dystrophy, hypercholesterolemia, osseous intestinal polyposis, adenosine deaminase deficiency, malignant melanoma, glucose-6-phosphate dehydrogenase deficiency syndrome, arteriosclerosis, and hypercholesterolemia, Gaucher's disease, cystic fibrosis, osteopetrosis, increased spontaneous tumors, T and B cell immunodeficiency, high cholesterol, arthritis, including rheumatoid arthritis, glaucoma, or alcoholism. It can be also used to treat neoplastic diseases including cancer (e.g. breast, pancreatic, gastric, prostate, colorectal, lung, ovarian), lymphomas (such as Hodgkin and non-Hodgkin lymphoma), melanoma, and malignant melanoma, advanced cancer lymphoma B, renal cell carcinoma, **glioblastoma**, astrocytoma, gliomas, acute myelogenous leukemia (AML), or cell-mediated lympholysis (CML). It can be used to treat cardiovascular diseases including stroke, cardiomyopathy associated with Duchenne Muscular Dystrophy, myocardial ischemia, or restenosis; infectious diseases such as hepatitis, HIV infections and acquired immunodeficiency syndrome (AIDS), herpes, cytomegalovirus (CMV), or associated disease such as CMV retinitis; and transplantation related disorders such as renal transplant rejection. It is also used in vaccine therapies and immunization, including melanoma vaccines, HIV vaccines, malaria, or tuberculosis.

ADVANTAGE - The polynucleotide molecules in the inventive composition decrease the integration of polynucleotide into the genome of the host organism; and decrease the development of anti-polynucleotide (or anti-DNA) antibodies which have been associated with diseases such as systemic lupus erythematosus.

Log: 0

FS CPI

FA AB; ICH

MC CPI: A05-H-3A3; A05-H04A; A11-W111; B04-C03; B04-E02; B04-E03; B04-E08; B04-F11; B12-M03; B12-M07; B14-A03B1; B14-A04; B14-A05B; B14-C09B; B14-D02A2; B14-B10C; B14-F11E; B14-F11G; B14-F03; B14-F06; B14-F07; **B14-G01; B14-G02C; B14-H01; B14-J01E; B14-K01;** B14-L06; B14-M01A; B14-M01; B14-N03; B14-N11; B14-N17C; B14-S03A; B14-S11; D05-H07; D05-H11A; D05-H12B; D05-H12E

TECH UPTX: 20020126

TECHNOLOGY FOCUS - POLYMERS - Preferred Component: The composition may



TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred Component: The polynucleotide is at nucleic acid (RNA), deoxyribonucleic acid (DNA), plasmid DNA, virus, or viral vector. It encodes a secreted or non-secreted protein, vaccine, or antigen. The composition may also contain a gene expressing a secreted or non-secreted protein, vaccine or antigen and gene(s) expressing an adjuvant **antigen presenting cells** and induce immune response for enhanced presentation.

EXAMPLE - A composition contained copolymer from Fluronic A, and

polycation from poly(N-ethyl-4-vinylpyridinium bromide) (pEVP-Br). A 10 micro g/ml solution of rho beta-GAL (predominantly supercoiled) was prepared in a solution of PBS containing 10 mg/ml of Pluronic A and 45 micro g/ml of pEVP-Br. These amounts were calculated to provide a ratio of polycation basic groups to plasmid phosphate groups of 10. The ratio of Pluronic A to DNA was 100. This stock was filter sterilized and a portion was diluted ten fold with serum-free Dulbecco's Modified Eagle's Medium (DMEM), so that the concentration of rho beta-GAL was 1 micro g/ml. This solution was the Pluronic A transfecting medium.

L114 ANSWER REF 4 WPBX (7) 1003 THOMSON (ERWENT

AN 2 11-31-1991 [27] WPBX

BNN N 01-104775 DNN 01001-114003

TI **Antigen-binding fragments specific for stress protein-peptide complexes (SPPCs), associated with tumors and cancer associated SPPCs, useful in treating a range of cancers.**

BC B 4 11-31-91

IN EAM, M; ENWISTLE, J; EAST, L; KARLAN, H; LEWIS, F; MACDONALD, G; MAITI, P

FA (PVP-Br) DEXOPHARM BIOTECH INC

CYC 90

FI WO 199100392 A1 20010607 (2001 7)\* EN 170p CO7K014-47

FW: AT BE CH CY DE DK EA EP FI FF GE GH GM GR IE IT KE LS LU MC MW NL  
OA PT SD SE SI SJ SW UG

W: AE AL AM AT AU AZ BA BB BG BF BY CA CH CN CO CU DE DK DM EE ES  
FI GE GD GG GH GI HF HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS  
LI LU LV MA ME MG MF MU MW MX NC NZ PL PT RO RU SD SE SG SI SK SL  
TJ TM TR TT UA US UG UZ VN YU ZA ZW

AD 2000013703 A 20010611 (2001 34) CO7K014-47

ADT WO 199100392 A1 WO 1999-CA1141 199-1129; AD 2000013703 A WO 1999-CA1141 199-1129; AD 2000-104775 199-1129

FDT AD 2000-104775 A EAM EN W 01-104775

PRAI WO 1999-CA1141 199-1129

IC 10M CO7K014-47

ICS AC10039-385; CO7K010-10; 012N015-10; 001N013-174

AB WO 199100392 A UPAP: 10010704

**NOVELTY** - Antigen-binding fragments specific for stress protein-peptide complexes (SPPCs) associated with tumors and cancer associated SPPCs, are new.

**DETAILED DESCRIPTION - INDEPENDENT CLAIMS** are included for the following:

- (I) a composition comprising an isolated stress protein-peptide complex (SPPC) capable of binding specifically to an anti-SPPC;
- (II) a composition comprising at least 1 isolated SPPC which is immunologically cross-reactive with a cancer cell surface associated SPPC;
- (III) a composition comprising the peptide portion of any isolated SPPC contained in (II);
- (IV) a polynucleotide encoding the peptide of (III);
- (V) a composition comprising a purified SPPC corresponding to one of the SPPCs specifically recognized by H11 within a population of SPPCs derived from A-375 human melanoma cell line;
- (VI) a process for creating an immunogen using the peptide portion of an SPPC by linking the peptide portion to a peptide coupling molecule;
- (VII) an **antigen presenting cell** sensitized with the above composition;
- (VIII) a composition comprising an antigen binding fragment of an antibody which binds specifically to at least 1 (different) cancer-associated SPPCs;
- (IX) a cancer cell imaging composition comprising (VIII) bound to a detectable label;
- (X) a method of treating an individual with primary or metastasized cancer, comprising:
  - (a) sensitizing **antigen-presenting cells**

in vitro with (IX); and

(b) administering the sensitized **antigen presenting cells**;

(11) a composition (XI) comprising sensitized **antigen presenting cells** produced by (X);

(12) a method (XII) of selecting monoclonal antibodies (MAbs) directed against cancer associated SPPCs;

(13) a method (XIII) of generating cancer associated SPPCs;

(14) a population (XIV) of genetic packages with a genetically determined outer surface protein including those that collectively display a number of different potential immunoglobulin binding fragments in association with the outer surface proteins, each package included a nucleic acid construct coding for a fusion protein or a portion of the outer surface protein and a variant of at least 1 parental anti-SPPC immunoglobulin binding fragment (a part of the construct includes a part of the CDR3 region of the VH chain which is randomized to create variation among the potential binding fragments, is biased in favor of encoding the amino acid constitution of a the parenteral immunoglobulin binding fragment);

(15) a composition (XV) comprising an antigen-binding fragment of an antibody specific for a cancer associated SPPC which elicits a cancer-associated immune response in a subject;

(16) a method (XVI) of treating a cancer patient comprising administering (XVI);

(17) a method (XVII) of identifying antigen-binding fragments of an antibody specific for a tumor-associated SPPC;

(18) a method (XVIII) of isolating an antigenic tumor associated SPPC;

(19) a method (IXX) of isolating a peptide forming part of an antigenic tumor-associated peptide complex;

(20) a method (XXI) of isolating an antigenically active tumor-associated protein-peptide complex;

(21) a composition (XXII) comprising an antigenic native SPPC which is immunologically cross-reactive with an SPPC on the surface of cancer cells;

(22) cancer-associated antigen binding fragments (XXIII) which react specifically with a T-antigen;

(23) an immunoaffinity matrix (XXIII) to which an anti-SPPC is bound;

(24) a cancer associated anti-SPPC;

(25) a method of making an anti-SPPC by modifying a multi-carcinomic anti-SPPC or an anti-SPPC that binds to a number of SPPCs;

(26) a method of making an anti-SPPC by modifying an anti-SPPC that binds to the same target as H11 as determined by competitive inhibition assay;

(27) a monoclonal, polyclonal or phage library derived anti-SPPC that binds specifically to an isolated SPPC;

(28) a polynucleotide encoding an anti-SPPC; and

(29) a variant of H11 or E8 which binds specifically to an SPPC.

ACTIVITY - Cytostatic.

No suitable data given.

MECHANISM OF ACTION - Immunostimulation.

USE - The cancer-specific SPPC complexes are useful for initiating cancer-specific immunogenic responses against a variety of cancers.

The cancer cell-types are astrocytoma, fibrosarcoma, myxosarcoma, liposarcoma, oligodendroglioma, epidermoma, medulloblastoma, primitive neural ectodermal tumor (PNET), chondrosarcoma, osteogenic sarcoma, pancreatic ductal adenocarcinoma, small and large cell lung adenocarcinomas, chorioma, angiosarcoma, endotheliocarcinoma, squamous cell carcinoma, bronchoalveolarcarcinoma, epithelial adenocarcinoma, and liver metastases thereof, lymphangiosarcoma, lymphangioblastotheliocarcinoma, hepatoma, cholangiocarcinoma, synovium, mesothelioma, Ewing's tumor, rhabdomyosarcoma, colon carcinoma, basal cell carcinoma, sweat gland

carcinoma, papillary carcinoma, sebaceous gland carcinoma, papillary adenocarcinoma, cystadenocarcinoma, medullary carcinoma, bronchogenic carcinoma, renal cell carcinoma, bile duct carcinoma, chorionic carcinoma, seminoma, embryonal carcinoma, Wilms' tumor, testicular tumor, neuroblastoma, craniopharyngioma, epidermoma, pinealoma, hemangioendothelioma, acoustic neuroma, oligodendroglioma, kidney adenocarcinoma, meningioma, neuroblastoma, retinoblastoma, leukemia, multiple myeloma, Waldenstrom's macroglobulinemia, and heavy chain disease, breast tumors such as ductal and lobular adenocarcinoma, squamous and adenocarcinomas of the uterine cervix, uterine and ovarian epithelial carcinomas, prostatic adenocarcinomas, transitional squamous cell carcinoma of the bladder, B and T cell lymphomas (nodular and diffuse) plasmacytoma, acute and chronic leukemias, malignant melanoma, glioblastoma, colon adenocarcinoma, small cell lung carcinoma, soft tissue sarcomas, uterine adenocarcinoma, ovarian adenocarcinoma, plasmocytoma, prostate adenocarcinoma, larynx carcinoma and leiomyosarcomas claimed.

Fig. 6/1.

FS FI FI

FA AB; ICH

MC FI: F04-B040; F04-B04L; B04-C01; B04-E01; F 4-F01; F04-G05; B04-G0500E; B04-H0500E; B11-C00A; B11-C 00E; B11-F04A1; B12-F04E; B11-E01; B14-S11E; B05-A01A; 1-5-A 1B; D05-C11; D 5-E07; D05-E 3; D05-E09; 105-H10; D05-H11; D05-H12; F05-H11; 105-H18  
FI: F05-E1884

TECH UPTX: 10010784

TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred Compositions: In (I), the SPPO binds specifically to the surface of a stressed cell, especially a cancer cell. The SPPO is immunologically cross-reactive with a cancer cell surface associated SPPO. The stress protein of the SPPO belongs to either the HSP70 or HSP90 family. The stress protein is HSP72, HSP86 or HSP96. In (II), the anti-SPPO binds to at least 2 different cancers and binds specifically to a number of different SPPOs including SPPOs belonging to more than 1 family. The SPPO is immunologically cross-reactive with cancer cell surface associated SPPOs on at least 2 different cancers. The stress protein of the SPPO belongs to either the HSP70 or HSP90 family. The stress protein is HSP72 or HSP86. (iii) further comprises at least 1 other different SPPO which is immunogenically cross-reactive with a cancer associated SPPO. The additional SPPO is also capable of binding to the anti-SPPO. The stress proteins of the additional SPPOs belong to both of the HSP70 or HSP90 families. The SPPO is immunologically cross-reactive with more than 1 type of cancer cell population which is/are capable of exhibiting cell surface associated SPPOs. The anti-SPPO is H11 or E6.

In (V), the SPPO belongs to the HSP70 or HSP90 family.

In (VIII), the antigen binding fragment of an antibody binds specifically to a number of different cancer cell types. The SPPOs belong to different families of stress proteins, especially those defined above. The antigen binding fragment and the target cancer cell are of human origin. The antigen binding fragment does not have an Fc portion for activating complement. The composition is free of synergistic cancer cell inhibiting or killing compounds.

(IX) is used for imaging a cancer cell, especially a cell in a mammal. The anti-SPPO is linked to a group which assists in detecting specific binding of the anti-SPPO to a ligand. (IX) May also be used for treating or preventing cancers in mammals. (IX) is especially for use with a number of cancer cell types that are capable of exhibiting SPPOs on the surface of the cell, especially carcinoma cells.

The antigen-binding fragment competitively binds to the same target as H11 or E6 as determined by competitive inhibition assay.

Preferred Processes: In (VI) the peptide portion is covalently associated with the peptide coupling molecule or non-covalently associated to a peptide presenting molecule. The peptide-coupling molecule is a heat-shock

protein.

L114 ANSWER 4 OF 4 WPIX (2) 2003 THOMSON PERWENT

AN 1000-038136 [61] WPIX

DNC C.100-125055

TI Inhibiting immune responses to selected antigens for treating immune mediated diseases, by incubating **antigen presenting cells** with composition comprising factors secreted by **glioblastoma cell line**.

DC B-4 100

IN CHOURDET, C; COLIGAN, J E; SHLAEPER, G M; ZUO, J; ZOU, J

PA USSH. OF DEPT HEALTH & HUMAN SERVICES; (USSH) US NAT INST OF HEALTH

CYC 4

PI WO 2000050356 A2 20000925 (200001) EN 13p A61P039-00

BW: AT BE CH CY DE DK EA EG FI FP GB GR HI IE IT KE LF LU MC MW NL  
OA PT SI SE SL ST TT UG UW

W: AE AG AL AM AT AU AZ BA BB BG BF BY CA CH CI CJ CK CL DE DK DM DZ  
EE ES FI GE GG GH GI GL GN GU HW HX HY IZ IL IN IS JP KE KG KI KK KM KN  
LP LS LT LU LV MA MD ME MF MI MW MX NO NZ PL PT PQ PR PS SE SG SI  
SF SL TJ TM TN TR UA UB UC UD UE VU YU ZA ZW

AT 2000040195 A 20001009 (200001) EN 13p A61P039-00

EP 115101 A2 20000902 (200001) EN 13p A61P039-00

A: AA AT BE CH CY DE DK EA EG FI FP GB GR HI IE IT KE LF LU LV MW NX NY NZ  
OA PT SI SE SL ST TT UG UW

JP 2000050356 W 20001119 (200001) EN 13p A61P039-00

ADT W 2000050356 A2 WO 2000050356 (200001) A2 2000040195 A WI 2000-40295  
2000040195; EP 115101 A2 EP 2000-115101 (200001) A2 2000-0323; WO 2000-0323;

JP 2000050356 W JP 2000050356 (200001) A2 2000-0323

FDT AT 2000040195 A Based on WO 2000050356; EP 115101 A Based on WO  
2000050356; JP 2000050356 W Based on WO 2000050356

PRAI US 1999-125996P 19990324

IC 2M A61P039-00; A61P039-00; A61P039-00

2S A61P039-00; A61P039-00; A61P039-00; A61P039-00; A61P039-00;

A61P039-00; A61P039-00; A61P039-00; A61P039-00

AB WO 2000050356 A USAB: 20001119

INVENTY - A method (I) for specifically inhibiting an immune response to selected antigens, comprising incubating **antigen presenting cells (APCs)** that present an antigen against which selective inhibition of an immune response is desired, with an immunosuppressive composition comprising factors secreted by a **glioblastoma cell line** (G), or new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a purified immunosuppressive composition (G) for the reduction of an immune response to one or more selected antigens, comprising one or more factors secreted by (G) having the following characteristics:

(a) incubation of the composition with **APCs** presenting an antigen, and subsequent exposure of the incubated **APCs** to T cells specific for the antigen, induces the T cells to undergo anergy or apoptosis;

(b) a molecular weight greater than 10 kDa;

(c) inability to bind to anion, but not cation exchange columns;

(d) maintain an ability to induce T cells to undergo anergy or apoptosis under the conditions of (a) within the pH range of 2-11, following heat exposure up to 60 deg. C, and following immunoprecipitation of TGF- $\beta$  (transforming growth factor- $\beta$  1, TGF- $\beta$  2, TGF- $\beta$  3, IL (interleukin)-6, calcitonin gene related peptide (CGRP) and macrophage colony stimulating factor (M-CSF) from the composition; and

(e) loses the ability to induce T cells to undergo anergy or apoptosis under the conditions of (a) following heat exposure above 65 deg. C, or after exposure to trypsin; and

(2) a preparation of (G) for suppressing an immune response to an antigen, by incubating a supernatant harvested from a (G) culture and the

antigen with an **APC**.

**ACTIVITY** - Neuroprotective; antirheumatic; antiarthritic; dermatological; immunosuppressive; antiinflammatory; antidiabetic.

**MECHANISM OF ACTION** - Inhibits immune response by inducing apoptosis and/or anergy in T cells specific for selected antigens (claimed).

Peripheral blood mononuclear cells (PBMC) from healthy individuals were stimulated with phytohemagglutinin (PHA) or with a mixture of influenza A virus (FLU), tetanus toxoid (TT) and candida (CACTA) in the absence or presence of glioblastoma culture supernatant (GCS) generated by JMB-99 glioblastoma cell lines. The results indicated that GCS inhibited proliferative responses to both stimuli in a dose-dependent manner. GCS produced by the tumor cell line strongly inhibited T lymphocyte responses to a T cell mitogen and to Th-dependent recall antigens that required intact **antigen presenting cells (APC)** function. As negative controls, culture supernatants from 3-7 tumor lines and two laboratory-generated Epstein Barr Virus (EBV)-transformed cell lines were taken which did not inhibit T cell proliferation or induce changes in IL-12 and IL-10 production when added to PBMC.

**TNE** - (I) is useful for enhancing tolerance in a host mammal to an allogeneic donor graft. The allogeneic antigen is an antigen from the donor graft and the **APCs** are isolated from the organ, tissue, bone marrow of a mammal. (II) is also useful for enhancing tolerance in a host mammal to an autoantigen. (I) is useful as a medicament for treating immune mediated diseases (claimed) such as MS (multiple sclerosis), RA (rheumatoid arthritis), MG (myasthenia gravis), SLE (systemic lupus erythematosus) and IDDM (insulin dependent diabetes mellitus).

Org. C 13

FS GPI

FA AB; DNI

MC GPI: B14-H04C; B14-F01; B14-F14; B14-H04G; B14-H14B; B14-H04F; B14-K01; B14-N01; B14-C01; B14-C02; B14-C03; B14-G02; B14-N17; B14-S01; B14-S04; B01-H01; D01-H03

TECH LPTX: 20001124

**TECHNOLOGY FOCUS - BIOLOGY** - Preferred Method: (I) further comprises introducing the **APCs** into a subject in need of a reduced immune response to the antigen to selectively inhibit the immune response of the subject to the antigen. In (II) **APCs** are obtained from a transplant donor and express a transplant antigen or present an autoantigenic antigen. (I) inhibits immune response by inducing apoptosis and/or anergy in T cells specific for the selected antigens. **APCs** are obtained from a donor other than a subject, and the selected antigens are donor-specific antigens present on an allogeneic graft. The **APCs** are obtained from a donor of an allogeneic graft and the selected antigen is an autoantigenic protein of an autoimmune disease. The **APCs** are isolated from a subject suffering from an autoimmune disease such as multiple sclerosis (MS), rheumatoid arthritis (RA), myasthenia gravis (MG), systemic lupus erythematosus (SLE), or insulin dependent diabetes mellitus (IDDM), and are repetitively exposed to one or more peptide fragments of the autoantigenic protein of the autoimmune disease. The autoantigenic protein is myelin basic protein (MBP), type II collagen, acetyl choline receptor (AChR), nuclear proteins, or pancreatic islet cell antigens. The **APCs** are noncytotoxic isolated from the donor's or subject's blood, macrophages or dendritic cells. Preferred Cell Line: **Glioblastoma** line is JMB 12, U251 A172, A1207, A1235, A2781, U87 MG, U138 MG or U373 MG.

Preferred Composition: The incubation of (C) with an effective amount of monocytes, dendrites and B cells causes decreased expression of Major histocompatibility complex (MHC) class II antigens and CD 80, 86 on the surface of the monocytes and the dendrites, but no effect on the expression of MHC class II antigens and CD 80, 86 on the B cells, increased expression of IL-10 in monocytes and dendrites, and decreased expression of IL-12 in monocytes and dendrites.

Preparation: (P) comprises combining (C) with a pharmaceutical carrier.  
 APC is purified to produce a pure APC composition prior  
 to or after incubating with the S-culture supernatant.

ABEX

A.MINISTRATION - APCs are administered by intravenous,  
 subcutaneous, intramuscular or intraperitoneal routes (claimed) at a dose  
 of  $30 \times 10^6$  power 6 to  $60 \times 10^6$  power 6 cells.

=> fil dpt

FILE 'LPC1' ENTERED AT 13: 1:17 ON 31 JAN 2003

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FILE LAST UPDATED: 20 JAN 2003 (20030120/UP)

PATENT CITATION INDEX, COVERS 1.7% TO DATE

>>> LEARNING FILE LPC1 AVAILABLE OK

=> d all

LL15 ANSWER 1 OF 1 LPC1 (C) 2003 THOMSON DEPENT

AN 2001-038236 [61] DE

DNC 0000-131055

T1 Inhibiting immune responses to selected antigens for treating immune  
 mediated diseases, by incubating antigen presenting cells with composition  
 comprising factors secreted by plasmotoma cell line.

DC P4 016

IN CHENNET, J; COLLICAN, J E; SHEAPER, G N; ZOO, J; ZOU, J

PA USSH; US DEPT HEALTH & HUMAN SERVICES; USSH; US NAT INST OF HEALTH

CYC 0

PI WO 2000056356 A1 20000628 WO 20010101\* EN 63p A61K039-00

FW: AT BE CH CY DE DK ES FI FR GE GR HM IE IT KE LS LU MC MW NL  
 OA PT SP SE SI TT UG OW

X: AR AG AL AM AT AU AC EA EE EG EF BY CA CH CN CR CU CZ DE DK DM DZ  
 EE ES FI FR GE GR HM HU IL IN IS JP KE KG KP KR KZ LC LK  
 LF LS LT LU LV MA MB ME MF MN MO NZ NL NO NZ PL PT RO RU SD SE SG SI  
 SK SL TO TM TR TT UA UG US VE VN YU ZA ZW

AD 2000040295 A 20001029 20001029 A61K039-10

EP 1165101 A 20000102 20000102 EN A61K035-14

P: AL AT BE CH CY DE DK ES FI FR GE GR IE IT LI LT LU IV MC MK NL PT  
 PL SE SI

JP 200108171 W 20011119 20011119 63p A61K035-12

ADT WO 2000056356 A1 WO 2000-030359 20000323; AU 2000040295 A AU 2000-40295  
 2000-030359; EP 1165101 A1 EP 2000-010639 20000323; WO 2000-US7959 20000323;  
 JP 200108171 W JP 2001-080266 20000323; WO 2000-US7959 20000323

FDT AU 2000040295 A Based on WO 2000056356; EP 1165101 A1 Based on WO  
 2000056356; JP 200108171 W Based on WO 2000056356

PRAI US 1999-125996P 19990324

IC ICM A61K035-12; A61K035-14; A61K035-10

ICS A61K035-04; A61K035-10; A61K035-02; A61K035-00; A61K035-04;  
 A61K035-00; A61K035-00; A61K035-02; A61K035-06

FS TPI

#### CTCS CITATION COUNTERS

|        |   |                                             |
|--------|---|---------------------------------------------|
| PNC.DI | 0 | Cited Patent: Count (by inventor)           |
| PNC.EX | 2 | Cited Patents: Count (by examiner)          |
| IAC.DI | 0 | Cited Issuing Authority Count (by inventor) |
| IAC.EX | 1 | Cited Issuing Authority Count (by examiner) |
| PNC.CI | 0 | Citing Patents Count (by inventor)          |
| PNC.CX | 0 | Citing Patents Count (by examiner)          |

IAC.GI 0 Citing Issuing Authority Count (by inventor)  
 IAC.GX 0 Citing Issuing Authority Count (by examiner)  
 CRC.I 0 Cited Literature References Count (by inventor)  
 CRC.X 2 Cited Literature References Count (by examiner)  
 CDP CITED PATENTS UPD: 20011110

Cited by Examiner

| CITING PATENT | CAT | CITED PATENT                                                      | ACNO             |
|---------------|-----|-------------------------------------------------------------------|------------------|
| WO 200056356  | A X | EP 1554 3                                                         | A 1995-238027/39 |
|               |     | PA: (FONT-I) FONTANA A; (SANO) SANDOL LTD                         |                  |
|               |     | IN: FONTANA, A                                                    |                  |
|               | X   | EP 1552 9                                                         | A 1995-263190/42 |
|               |     | PA: (SANO) SANDOL PATENT (GER); SANO SANDOL AG; (SANO) SANDOL LTD |                  |
|               |     | IN: FONTANA, A                                                    |                  |

REN LITERATURE CITATIONS UPD: 20011129

Citations by Examiner

| CITING PATENT | CAT | CITED LITERATURE                                                                                                                                                                                                                                                                   |
|---------------|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| WO 200056356  | A   | PIANT-PIES ZOU ET AL.: "Human Glioma-Induced Immunosuppression Involves Soluble Factor(s) That Alters Monocyte Cytokine Profile and Surface Markers" JOURNAL OF IMMUNOLOGY, vol. 162, 1999, pages 4832-4837, XP00149737 THE WILLIAMS AND WILKINS CO. BALTIMORE, US ISSN: 0022-1767 |
| WO 200056356  | A   | LOEFF A. MURFORD ET AL.: "Apoptotic elimination of peripheral T lymphocytes in patients with primary intracranial tumors" JOURNAL OF NEUROSCIENCE, vol. 19, no. 6, December 1999 (1999-12), pages 941-946, XP00952674 XX, XX ISSN: 0920-3658                                       |

\* fil wpi.x  
 FILE 'WPIX' ENTERED AT 15:33:42 ON 01 JAN 2003  
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FILE LAST UPDATED: 20 JAN 2003 <2003019/UE>  
 MOST RECENT DEFWENT UPDATE: 200307 <200307/DW>  
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/PIX is also provided which comprises both /BI and /ABEX <<<

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=> d all abex tech abex tot

LI18 ANSWER 1 OF 2 WPIX (C) 2003 THOMSON DERWENT

AN 1985-100140 (42) WPIX

CR 1985-100147 (39)

DNC 0180-114083

TI New immunosuppressant factors from human glioblastoma cells - useful for  
inhibiting interleukin-2 dependent T-cell mechanisms or with interleukin-1  
like activity.

DC 804 010

IN BONTANA, A

PA (SANG) SANGLO PATENT GMBH; SANG; SANGLO AG; SANG; SANGLO LTD

CYC 16

FI WO 8504421 A 19851010 (198547) EN 30p

W: AT IK JP

EP 1985 A 19851023 (198547) EN

F: AT BE CH DE DK FR GB IT LI LU NL SE

AT 850418 G A 19851101 (198547)

DE 850418 G W 19860714 (198547)

DK 850418 G A 19851101 (198547)

IT 1478 A 19851101 (198547)

EP 1985 B 19851010 (198547) EN

F: AT BE CH DE DK FR GB IT LI LU NL SE

DE 850418 G 19850611 (198547) C12P011-00

EP 850418 G B1 19841010 (198547) 15p C07K015-04

DK 171600 B 19870217 (198547) C07K014-47

EP 850418 A 19840512 (198547) C12P011-00

ADT WO 8504421 A WO 1985-EP107 19850316; EP 150289 A EP 1985-810114 19850315;

JP 61501514 W JP 1985-591675 19850416; EP 159089 B EP 1985-810114

19850315; DE 358506 G DE 1985-358506 19850315; EP 1985-810114 19850315;

JP 6080760 B2 JP 1985-101675 19850316; WO 1985-EP107 19850316; DE 171600

B WO 1985-EP107 19850316; DE 1985-1390 19851101; PH 20248 A PH 1985-31957

19850317

FDT DE 358506 G Based on EP 150289; JP 6080760 B2 Based on JP 61501514,

Based on WO 8504421; DK 171600 B Previous Publ. DE 3505322

PRAI DE 1984-10073 19841103; EP 1985-810114 19850315

REP A. Bontana

IC 121 207EP14-47; C07K015-04; C12P011-00

123 207EP15-13; A01K037-07; C07K014-35; C07E003-00; C12E001-19;

C12E001-01

ICI C12P011-00, C12E001-01

AB WO 8504421 A UPAB: 19970000

Immunosuppressant factor (I) derived from human glioblastoma cells and  
inhibiting interleukin-2 (IL-2) dependent T-cell mechanisms is new. (2)  
Immunosuppressant factor (II) derived from human glioblastoma cells and  
showing interleukin-1 (IL-1) like activity and having a molecular wt. of  
about 22000 is new.

Pref. (I) has a molecular wt. of about 97000 daltons. It is sensitive

to tryptic proteolysis; it inhibits the incorporation of tritiated-Tdr into murine thymocytes stimulated with ConA or PHA in presence of IL-2; and it has an isoelectric point of pH 4.6 (on flatbed isoelectric focussing).

USE/ADVANTAGE - (I) inhibits the IL-2 effect on thymocytes in the presence of lectins and on the induction of alloreactive cytotoxic T-cells in mixed lymphocyte cultures, and it inhibits the growth of neuroblasts but not fibroblasts. It also inhibits the lectin response of human peripheral blood mononuclear cells. (II) enhances the PHA-induced thymocyte proliferation, it has no IL-2 activity and it augments IL-2 prodn. by mitogen-stimulated spleen cells. (I) and (II) are released in vivo and in vitro from the glioblastoma cells and are effective against non-lymphoid tumours.

Inv. 1991.

FS CP1

FA AB

MC CP1: B04-B04B; B12-D02; B12-G01; B12-G07; D05-C; D05-H01

ABEQ DE 1110; 6 UAB: 19910915

1. Immunosuppressant factor (I) derived from human glioblastoma cells is new when it inhibits interleukin 2 (IL-2) dependent T-cell mechanism and has a molecular wt. of about 97000. (2) Factor (II) for inhibition of neuroblast growth and having a molecular wt. of about 77000 is new. (3) Interleukin 1 (IL-1) like factor (III) derived from human glioblastoma cells and having a molecular wt. of about 22000 is new. 4. Supernatant harvested from cultured human glioblastoma cells contg. a factor (I) and/or (II) and/or (III) is new.

USE/ADVANTAGE - (I) has an inhibitory effect on IL-2 dependent T-cell mechanisms and inhibits IL-2 induced proliferation of T-cell clones and the induction of alloreactive cytotoxic T-cells in mixed lymphocyte cultures. It also inhibits the growth of neuroblasts but not of fibroblasts.

III promotes morphological differentiation of Neuro LA cells. (III) is an IL-1 like mediator, as it enhances PHA-induced thymocyte proliferation and it has no IL-1 activity but augments IL-1 prodn. by M-stimulated spleen cells.

ABEQ EF 1110; 6 UAB: 19910915

A. Immunosuppressant factor isolated from human glioblastoma cells which; (aa) inhibits the incorporation of tritiated thymidine into murine thymocytes stimulated with Con-canavalin A or phytohaemagglutinin in the presence of IL-2; (bb) inhibits the proliferation of IL-2 dependent T cell clones; (cc) suppresses the growth of neuroblasts but not fibroblasts; (dd) inhibits the generation of cytotoxic T cells in the allogenic mixed lymphocyte reaction; (ee) inhibits the proliferation of hapten-specific cytotoxic T cells in the presence of haptenated stimulator; (ff) inhibits the proliferative response of thymocytes to concanavalin A and (hh) is sensitive to tryptic proteolysis.

L118 ANSWER OF 1 WPIX 00 2003 THOMSON DERWENT

AN 1995-100017 [30] WPIX

CR 1995-100010 [41]

DNC CP045-100016

TI New factors obtd. by cultivating human glioblastoma cells - include immunosuppressant, neuroblast growth inhibitor and interleukin-1 like factor.

DC B-1 D16

IN FONTANA, A

PA (NDW) NOVARTIS AG; FONT-1 FONTANA A; (SANO) SANDOZ LTD

CYC 5

PI EP 19931 A 19950925 199509 \* EN 30p

EP 19931

ZA 3502104 A 19961126 199602

US 5095005 A 19920310 (199213 18p

PH 28243 A 19940512 (199408

CA 1941401 C 20021126 (200305) EN 312P021-00

A61K035-12

ADT EP 155433 A EP 1984-310140 19840323; ZA 9592194 A ZA 1985-2194 19850322;  
US 5095095 A US 1990-563096 19900713; PH 2-249 A PH 1985-31957 19850307;  
CA 1 414011 C CA 1985-476106 19870009

PRAI EP 1984-310140 19840323; US 1984-553096 19900713; US 1984-594801  
1984 19; US 1987-300369 1987 1111

REP 4-Int. Ser.

IC A61K037-02; C07H01-00; C07H01-01; C12P01-11; C12R003-00

ICM A61K038-12; C12P021-00

ICN A61K038-12; A61K038-16; C12N 03-03; C12N13-03; C12N03-03;  
C12N01-02

AB EP 155433 A ABAB: 19840323

(1) Immunosuppressant factor (I) derived from human glioblastoma cells is new when it inhibits interleukin 2 (IL-2) dependent T-cell mechanism and has a molecular wt. of about 3000. (2) Factor (II) for inhibition of neuroblast growth and having a molecular wt. of about 7000 is new. (3) Interleukin 1 (IL-1) like factor (III) derived from human glioblastoma cells and having a molecular wt. of about 1200 is new. 4 Supernatant harvested from cultured human glioblastoma cells contain a factor (I) and/or (II) and/or (III) is new.

USE/ADVANTAGE - (I) has an inhibitory effect on IL-2 dependent T-cell mechanisms and inhibits IL-2 induced proliferation of T-cell clones and the induction of alloreactive cytotoxic T-cells in mixed lymphocyte cultures. It also inhibits the growth of neuroblasts but not of fibroblasts.

(II) promotes morphological differentiation of Neuro SA cells. (III) is an IL-1 like mediator, as it enhances PHA-induced thymocyte proliferation and it has no IL-2 activity but augments IL-2 produ. by B-stimulated spleen cells.

Reg. No. 8

Reg. No. 9

FS CFI

FA CP

MC CFI: B04-B04A; B12-D02; C05-B

ABEQ EP 155433 A ABAB: 19840323

(1) Immunosuppressant factor (I) derived from human glioblastoma cells is new when it inhibits interleukin 2 (IL-2) dependent T-cell mechanism and has a molecular wt. of about 3000. (2) Factor (II) for inhibition of neuroblast growth and having a molecular wt. of about 7000 is new. (3) Interleukin 1 (IL-1) like factor (III) derived from human glioblastoma cells and having a molecular wt. of about 1200 is new. 4 Supernatant harvested from cultured human glioblastoma cells contain a factor (I) and/or (II) and/or (III) is new.

USE/ADVANTAGE - (I) has an inhibitory effect on IL-2 dependent T-cell mechanisms and inhibits IL-2 induced proliferation of T-cell clones and the induction of alloreactive cytotoxic T-cells in mixed lymphocyte cultures. It also inhibits the growth of neuroblasts but not of fibroblasts.

(II) promotes morphological differentiation of Neuro SA cells. (III) is an IL-1 like mediator, as it enhances PHA-induced thymocyte proliferation and it has no IL-2 activity but augments IL-2 produ. by B-stimulated spleen cells.

ABEQ EP 155433 A ABAB: 19840323

Immunosuppressant factor (I) is characterised by (a) inhibiting the incorporation of tritiated thymidine into murine thymocytes stimulated with Concanavalin A or phytohaemagglutinin in the presence of IL-2; (b) inhibiting proliferation of IL-2 dependent T-cell clones; (c) suppressing the growth of neuroblasts but not fibroblasts; (d) inhibiting the generation of cytotoxic T cells in the allogeneic mixed lymphocyte reaction; (e) inhibiting the proliferation of hapten-specific cytotoxic T cells in the presence of haptenated stimulator; (f) inhibiting the proliferative response of thymocytes to concanavalin A; and (g) having a specific activity of at least 70,000 units/mg in the concanavalin A/thymocyte assay.

USE/ADVANTAGE - Factor is derived from human glioblastoma cells and inhibits the lectin response of human peripheral blood mononuclear cells isolated from blood donors. Prevents transplant rejection and treats auto-immune diseases.

1'1

=> fil medline

FILE 'MEDLINE' ENTERED AT 15:39:55 ON 31 JAN 2003

FILE LAST UPDATED: 30 JAN 2003 (20030130/UP). FILE COVERS 1958 TO DATE.

On June 9, 2002, MEDLINE was reloaded. See HELP RLOAD for details.

MEDLINE thesauri in the /CN, /CT, and /NN fields incorporate the MeSH 2003 vocabulary. See <http://www.nlm.nih.gov/mesh/summ2003.html> for a description of changes.

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L127 ANSWER 1 OF 2 MEDLINE  
 AU 2000049533 MEDLINE  
 DI 20049533 PubMed ID: 10584804  
 TI Apoptotic elimination of peripheral T lymphocytes in patients with primary intracranial tumors.  
 AU Morford L A; Dix A F; Frooks W H; Kozzman T L  
 CV Department of Microbiology and Immunology, University of Kentucky Medical Center, Lexington 40536-0084, USA.  
 SO JOURNAL OF NEUROSURGERY, (1999 Dec) 91 (6) 935-46.  
 Journal code: 0153357. ISSN: 0022-3085.  
 CY United States  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Abstract Index Medicus Journals; Priority Journals  
 EN 199911  
 ED Entered STN: 20000113  
 Last Updated on STN: 2000111  
 Entered Medline: 1999111  
 AB OBJECT: Patients with gliomas exhibit severe T lymphopenia during the course of the disease. This study was conducted to determine the mechanism(s) responsible for the lymphopenia. METHODS: Using two-color fluorescent staining techniques, the authors show that significant numbers of T cells undergo apoptosis in the peripheral blood of patients with gliomas. To determine whether a glioma-derived factor(s) induces this apoptosis, rosette-purified T cells obtained from healthy donors were treated with glioma cell culture supernatant (GCCS) and examined for apoptosis. It is demonstrated that treatment of normal T cells with GCCS induced apoptosis only with concurrent stimulation of the T-cell receptor/CD3 complex. The addition of neutralizing antibodies to interleukin (IL)-10, IL-4, transforming growth factor alpha, or tumor necrosis factor-beta (lymphotoxin) did not rescue these T cells from apoptosis. Experiments were also conducted in which the degree of monocyte involvement in the induction of T-cell apoptosis was explored. The U937 cells were pretreated for 20 hours with a 1:20 dilution of GCCS. After the removal of GCCS, the U937 cells were cultured in transwell assays with stimulated T cells. Although control U937 cells did not induce apoptosis of the activated T cells, GCCS-pretreated U-37 cells induced appreciable apoptosis in normal, stimulated T-cell cultures. CONCLUSIONS: These data indicate that one mechanism by which gliomas cause immunosuppressive

effects is the induction of monocytes to release soluble factors that promote activated T-cell apoptosis. The loss of activated T cells leads to T lymphopenia and contributes to the deficiencies in cell-mediated immunity that have been observed during testing of glioma patients' immune function.

CT Check Tags: Female; Human; Male; Support, Non-U.S. Gov't

Adult

Aged

\*Apoptosis: PH, physiology

\*Brain Neoplasms: IM, immunology

Cytokines: PH, physiology

Flow Cytometry

Glioblastoma: IM, immunology

\*Glioma: IM, immunology

Immune Tolerance: IM, immunology

Lymphocyte Transformation: IM, immunology

\*Lymphopenia: IM, immunology

Middle Age

Monocytes: IM, immunology

\*T-Lymphocytes: IM, immunology

T84 Cells: IM, immunology

CN C (Cytokines)

L127 ANSWER 2 OF 2 MEDLINE

AN 199910581 MEDLINE

DN 9019581 PubMed ID: 10202033

TI Human glioma-induced immunosuppression involves soluble factor(s) that alters monocyte cytokine profile and surface markers.

AU Zou J P; Morford L A; Chouhret C; Dix A R; Brooks A G; Torres N; Sauton J E; Colligan J E; Brooks W H; Roszman T L; Shearer G M

CS Experimental Immunology Branch, National Cancer Institute, National Institutes of Health, Bethesda, MD 20892, USA.

SO JOURNAL OF IMMUNOLOGY, (1999 Apr 15) 162 (8) 4882-92.

Journal code: 0022-1767. ISSN: 0022-1767.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Abridged Index Medicus Journals: Priority Journals

EM 199915

ED Entered STN: 19990517

Last Updated on STN: 19990517

Entered Medline: 19990506

AB Patients with gliomas exhibit deficient in vitro and in vivo T cell immune activity, and human glioblastoma culture supernatants (GCS) inhibit in vitro T lymphocyte responses. Because APC are essential for initiating and regulating T cell responses, we investigated whether GCS would affect cytokines produced by monocytes and T cells from healthy donors of PBMC. Incubation of PBMC with GCS decreased production of IL-12, IFN-gamma, and TNF-alpha, and increased production of IL-6 and IL-10. The GCS-induced changes in IL-12 and IL-10 occurred in monocytes, and involved changes in IL-12 p40 and IL-10 mRNA expression. Incubation with GCS also resulted in reduced expression of MHC class II and of CD80, 86 costimulatory molecules on monocytes. The immunosuppressive effects were not the result of IL-6 or TGF-beta1 that was detected in GCS. However, it was due to a factor(s) that is resistant to pH extremes, differentially susceptible to temperature, susceptible to trypsin, and has a minimum molecular mass of 40 kDa. Our findings show that glioblastoma-generated factors that are known to suppress T cell responses alter the cytokine profiles of monocyte/APC that, in turn, inhibit T cell function. This model indicates that monocytes can serve as an intermediate between tumor-generated immune-suppressive factors and the T cell responses that are suppressed in gliomas.

CT Check Tags: Human, Support, U.S. Gov't, P.H.S.

Antibodies, Monoclonal: ID, pharmacology  
 Antigens, CD: BI, biosynthesis  
 Antigens, CD: IM, immunology  
 Antigens, CD80: BI, biosynthesis  
 Antigens, CD80: IM, immunology  
 \*Antigens, Surface: BI, biosynthesis  
 Cell-Free System: CH, chemistry  
 Cell-Free System: IM, immunology  
 Cytokines: AI, antagonists & inhibitors  
 \*Cytokines: BI, biosynthesis  
 Glioblastoma  
 \*Gliosis: CH, chemistry  
 \*Glioma: IM, immunology  
 Glioma: ME, metabolism  
 Histocompatibility Antigens Class I: BI, biosynthesis  
 Histocompatibility Antigens Class I: IM, immunology  
 Interferon-gamma, Recombinant: PD, pharmacology  
 Interleukin-10: AI, antagonists & inhibitors  
 Interleukin-10: BI, biosynthesis  
 Interleukin-10: GE, genetics  
 Interleukin-10: IM, immunology  
 Interleukin-12: AI, antagonists & inhibitors  
 Interleukin-12: BI, biosynthesis  
 Interleukin-12: GE, genetics  
 Leukocytes, Mononuclear: IM, immunology  
 Leukocytes, Mononuclear: ME, metabolism  
 Lymphocyte Transfection: IM, immunology  
 Membrane Glycoproteins: BI, biosynthesis  
 Membrane Glycoproteins: IM, immunology  
 Monocytes: IM, immunology  
 \*Monocytes: ME, metabolism  
 RNA, Messenger: BI, biosynthesis  
 Receptors, Interleukin: IM, immunology  
 Staphylococcus aureus: IM, immunology  
 Suppressor Factors, Immunologic: CH, chemistry  
 \*Suppressor Factors, Immunologic: PH, physiology  
 T-Lymphocytes: IM, immunology  
 Tumor Cells, Cultured

RN 150068-17-8 (Interleukin-10 ; 157348-17-0 (Interleukin-12)  
 CN 0 (Antibodies, Monoclonal); 0 (Antigens, CD); 0 (Antigens, CD80); 0  
 (Antigens, Surface); 0 (B2-microglobulin); 0 (Cytokines); 0  
 (Histocompatibility Antigens Class I); 0 (Interferon-gamma, Recombinant);  
 0 (Membrane Glycoproteins); 0 (RNA, Messenger); 0 (Receptors,  
 Interleukin); 0 (Suppressor Factors, Immunologic); 0 (interleukin-10  
 receptors)

=&gt; d his

(FILE 'HOME' ENTERED AT 14:26:15 ON 31 JAN 2003)  
 SET CQSF OFF

FILE 'H+APLUS' ENTERED AT 14:28:31 ON 31 JAN 2003

E GLIOBLASTOMA/CT  
 E E1+ALL  
 L1 2 10 S E2  
 L2 48 S E6  
 L3 2 10 S L1, L2  
 E GLIOBLAST  
 L4 4 13 S E1-E14  
 L5 4 13 S L3, L4  
 E APCPTOSIS/CT  
 E E3+ALL

L6 46731 S E5,E4  
     E E3+ALL  
 L7 9835 S E3,E4,E6,E7  
     E APOPTO  
 L9 63631 S E3-E4  
 L1 24813 S E3-E4  
 L10 1 S E62  
 L11 44 S L1 AND L6-L10  
     E ME19  
 L12 4 S E1  
 L13 4 S ME 11  
 L14 4 S L11,L12  
 L15 4113 S L14,L1  
 L16 421 S L15 AND L6-L10  
 L17 421 S L11,L12  
 L18 421 S L1,L14 AND ?APOPTO?  
 L19 427 S L11,L12  
     E MULTIPLE SCLEROSIS/CT  
     E E+ALL  
 L20 6357 S E1  
 L21 8262 S E1-E5+BI  
 L22 13 S L1,L11 AND L17  
     E MYELIN BASIC PROTEIN/CT  
     E E+ALL  
 L23 3337 S E1,E11,E12+NT  
 L24 3316 S E1,E11-E12+BI  
 L25 3315 S MYELIN BASIC PROTEIN  
 L26 4 S L21-L23 AND L15  
 L27 7 S ME1 AND L15  
     E MONOCYTE/CT  
     E E+ALL  
 L28 133 S E1  
     E E+ALL  
 L29 19142 S E11  
 L30 30 S L21,L22 AND L15  
 L31 4 S L15 AND L22,L26,L27,L30  
     E SEPARATE G/AU  
 L32 142 S E1,E11,E12  
     E OLIGODENDROCYTE/AU  
 L33 144 S E4-E7  
     E OLIGODENDROCYTE/AU  
     E CHOU JIAN/AU  
 L34 300 S E1,E12  
     E CHOU JIAN/AU  
 L35 34 S E1,E14  
     E CHOU JIANHONG/AU  
 L36 117 S E1-E1  
     E OLIGODENDROCYTE/AU  
 L37 117 S E1-E1,L1  
     E CHOU JIAN/AU  
 L38 117 S E1,E  
     E CHOU JIAN/AU  
 L39 34 S E1  
 L40 66 S E16  
 L41 17 S E33,E40  
 L42 1022 S L41-L43  
 L43 1 S L42 AND L15  
     E ANTIGEN-PRESENT/CT  
     E E+ALL  
 L44 2231 S E1  
 L45 733 S E+NT  
 L46 7644 S ANTIGEN? PRESENT? CELL  
 L47 20 S L1 AND L44-L46

L49 13 S L5 AND ANTIGEN? PRESENT?  
 L49 2 S L17, L18  
 L50 1 S L14 AND L44-L46  
 L51 1 S L14 AND ANTIGEN? PRESENT?  
 L52 14 S L15 AND APC  
 L53 25 S L16, L55  
 L54 19 S L56 AND IMMUN? (L) RESPON?  
 L55 18 S L57, L54 AND L6-L13, L20, L21, L23-L25, L28, L29  
 SEL ON AN 1 5 6 9 10  
 L56 1 S E1-E11  
 L57 1 S L58, L54 NOT L55  
 SEL ON AN 1 12 13 16 23 24  
 L58 1 S L57 AND E1-E19  
 L59 11 S L58, L56, L55  
 E TRANSPLANTATION/CT  
 E E+ALL  
 L60 285 1 S E1, E2  
 L61 30 S E4  
 L62 261 5 S E6  
 E TRANSPLANT/CT  
 L63 444 S E3  
 E E+ALL  
 L64 2990 S E7-E11, E6+H7  
 L65 455 7 S E3+NT  
 E TRANSPLANT, CT  
 L66 444 S E4  
 L67 50 S L15 AND L60-L66  
 L68 148 S L15 AND (TRANSPLANT? OR GRAFT?)  
 L69 4 S L17, L18 AND L44-L46  
 SEL ON AN 2  
 L70 1 S E1-E4  
 L71 11 S L53, L70 AND L1-L70  
 L72 18 S L15 AND L44-L46  
 L73 1 S L15 AND L60-L66  
 L74 1 S L15 AND (TRANSPLANT? OR GRAFT? OR DONOR?)  
 L75 11 S L72, L74, L71  
 L76 10 S L71 NOT L71

FILE 'HCAPLUS' ENTERED AT 15:04:55 ON 31 JAN 2003

L77 54 S L15 AND A6IKOS9, IC, ICM, ICS  
 L78 1 S L15 AND L44-L46  
 L79 1 S L15 AND APC  
 L80 1 S L15 AND ANTIGEN? (L) PRESENT?  
 L81 4 S L78-L80  
 L82 1 S L81 NOT L77

FILE 'BIGSIS' ENTERED AT 15:09:38 ON 31 JAN 2003

E SHEARER, G AU  
 L83 487 S E3, E4  
 L84 141 S E14, E15  
 E ZHU J/AU  
 L85 41 S E3  
 E ZHU JIAN, AU  
 L86 1 S E1  
 E COLLIGNAN J AU  
 L87 41 S E4-E6  
 E CHOCQUET C AU  
 L88 1 S E3-E6  
 E ZHU J, AU  
 L89 616 S E3, E17  
 E ZHU JIAN, AU  
 L90 122 S E3  
 L91 11 S E10



E ZHOU JIANPING/AU  
 L92 13 S E3,E4,E2  
 L93 1910 S L83-L82  
 E GLIOBAS  
 L94 213 S E1-E11  
 L95 7464 S E3-E24  
 L96 7 S E13-E17,E29  
 L97 1 S L93 AND L94-L96  
 L98 2 S L87 AND (MONOCYTE OR GLIOMA?) TI  
 L99 10 DUP REM L93 L93 (0 DUPLICATES REMOVED)

FILE 'BIOBIS' ENTERED AT 15:18:41 ON 31 JAN 2003

L100 61 S ZOU J AU OR ZOU J P/AU  
 L101 2 S L100 AND L94,L95  
 L102 2 S L98,L99

FILE 'WPIX' ENTERED AT 15:16:43 ON 31 JAN 2003

E US04-115498/AP,PEM  
 L103 1 S E1  
 E GLICE  
 L104 523 S E4-F12  
 L105 511 S POLIOBLAS  
 L106 583 S L103 BIX  
 L107 584 S L104-L106  
 L108 6 S L107 AND (APC OR ANTIGEN? PRE. ENT? CELL?)/BIX  
 L109 1 S L108 AND (B10,ICM,ICS,ICA,ICI  
 L110 3 S L108 AND (B14-S01 OR C14-S01 OR B12-E01 OR C12-E01 OR B14-G?  
 L111 5 S L108 NOT L103,L109,L110  
 L112 1 S L111 AND ANTIGEN? TI  
 L113 4 S L110,L111

FILE 'WPIX' ENTERED AT 15:20:26 ON 31 JAN 2003

L114 4 S L107,L113

FILE 'DPC1' ENTERED AT 15:20:16 ON 31 JAN 2003

E US04-115498/AP,PEM  
 L115 1 S E1

FILE 'DPC1' ENTERED AT 15:21:17 ON 31 JAN 2003

FILE 'WPIX' ENTERED AT 15:21:30 ON 31 JAN 2003

E EF159483/IN  
 L116 1 S E2  
 E EF159498/IN  
 E EF159489/IN  
 L117 1 S E1  
 L118 2 S L116,L117

FILE 'WPIX' ENTERED AT 15:22:42 ON 31 JAN 2003

FILE 'MEDLINE' ENTERED AT 15:24:11 ON 31 JAN 2003

FILE 'HCAPLUS' ENTERED AT 15:30:18 ON 31 JAN 2003

E JOURNAL OF NEUROSURGERY/JT  
 L119 0 S E3 AND LOFRIT/AU  
 L120 31 S E3 AND 1499/PY  
 L121 0 S 925,90 AND L120

FILE 'BIOBIS' ENTERED AT 15:37:23 ON 31 JAN 2003

E JOURNAL OF NEUROSURGERY/JT

FILE 'MEDLINE' ENTERED AT 15:37:41 ON 31 JAN 2003

E JOURNAL OF NEUROSURGERY/JT

E JOURNAL OF NEUROSURGERY/JT  
L122      17 S E3 AND 935/SO  
L123      2 S L122 AND 1999/FY  
L124      1 S L123 AND MORFORD ?/AU  
          E JOURNAL OF IMMUNOLOGY/JT  
L125      16 S E3 AND (ZOU J? OR ZHOU J?)/AU  
L126      1 S 4882/SO AND L125  
L127      2 S L124,L126

FILE 'MEDLINE' ENTERED AT 15:39:55 ON 31 JAN 2003